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INDIAN JEWELLERY,

BY

COLONEL T. H. HENDLEY, C.I.E.

ANTIQUE JEWELLERY AND ORNAMENTS,
With reference to the history of the subject, and the origin and development of the different styles.
Miscellaneous Notes and Addenda.
Part II.—Concluding Number.

Illustrated by
Four Page Plates in Colours
and
Fifteen Page Plates in Monochrome

RAM SINGH DEL MAYO SCHOOL OF ART LAHORE

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In this exhaustive work an endeavour has been made to cover the whole known field of early carpet manufacture. The text (by Colonel T. H. Hendley, C.I.E.) is decorated in a style worthy of the charming designs illustrated; each page being surrounded with a beautiful 16th century Persian border in eight colours and gold. His Highness the Maharaja of Jaipur, with his well-known liberality, readily consented to allow his collection of old Persian and other carpets to be photographed specially for this work. From these carpets full-size patterns of the details, in colour of originals, have been prepared by Jaipur artists, also large "keys" showing the planning of the details in forming the schemes of design. In all cases the designs are on a large scale suitable for technical work. The best carpets and rugs now in the Indian and Persian Sections of the Victoria and Albert Museum have been photographed, including the beautiful Ardabil carpet* (see press notice).

* This carpet measures 34 feet by 17 feet 6 inches, and contains about 380 hand-tied knots to the square inch, which gives over 32,500,000 knots to the whole carpet. One-fourth of the carpet has been photographically reduced to half scale of original, and has been printed in the colours of the original to form 10 double plates (30 by 20 inches), and may also be obtained flat for mounting on linen, about 8 feet 6 inches by 4 feet 4½ inches, for Museums, Schools, and other educational or industrial purposes. The price of this part, or separate set of plates 101-125, for framing, is £3 net.

NOTE ON PERSIAN CARPETS. [*Daily Telegraph.*]

In the Indian section of the South Kensington Museum is now exhibited one of the most splendid examples of the product of the Persian loom that have ever been seen in Europe. This is the famous Ardabil or Ardebyl carpet, so-called from a Persian town in the province of Aderbaïdjan, which from time immemorial has been an emporium of merchandise, en route between Tiflis to Ispahan. Ardabil, which from the salubrity of its climate and the abundance of water which it enjoys has been called "the abode of felicity," is full of mosques and the tombs of exceptionally pious or otherwise renowned Mussalmans, and the famous carpet now on view is said to have been obtained from a mosque at Ardabil. It was not without difficulty that this wonderful piece of weaving was secured for South Kensington. The price demanded for it (£2,500)[1] exceeded that which the authorities of the Museum thought themselves justified to offer; but through the liberality of a number of gentlemen deeply interested in Oriental arts and crafts the sum which the Museum was prepared to give has been supplemented to an adequate amount. The carpet thus obtained for the nation measures 34 feet in length and 17 feet 6 inches in breadth, and an idea of the extreme fineness of its texture may be formed from the fact that it contains about 380 hand-tied knots to the square inch, which gives over 32,500,000 knots to the whole carpet. The main design comprises a large central medallion in pale yellow, surrounded by cartouches of various colours, disposed on a dark blue ground diapered with floral tracery. Each of the corners is filled with a section of a large medallion surrounded by cartouches. The border is composed of long and circular panels alternating with lobed outlines on a brown ground covered with floral embellishments, while at the summit of the carpet is a panel bearing a devout inscription tending to the inference that the carpet was originally used as a veil or curtain for a porch, and that it was the work of the slave "of the Holy Place, Maksoud, of Kashan, in the year of Hegira 946," corresponding with our A.D. 1540. Now, Kashan, on the high road between Teheran and Ispahan, was founded by Zobeide, the favourite wife of the Caliph Haroun-al-Raschid. It has been destroyed once or twice by earthquakes, but is at present a flourishing town adorned by a palace for the Shah, many large and beautiful mosques, and a number of caravanserais and public baths. At Kashan numerous manufactories of carpets, shawls, brocades, and silk fabrics are still carried on; but in 1540, when Maksoud, the slave of "the Holy Place," executed this marvellous work, admirable alike for its fineness of texture, its beauty of colour and symmetry of design, Kashan, with the rest of Persia, was under the sway of the Sophi dynasty, and the town is alleged to have contained no fewer than a hundred and fifty thousand inhabitants.

It is only within recent years that any very accurate knowledge of Oriental carpets has been disseminated in this country. The ordinary buyer knows three classes, and only three, which he roughly distinguishes as Turkey, Indian, and Persian carpets. The expert is, of course, a good deal more exact in his classification; but even his knowledge is as yet vague and confused. Carpets, either of cotton, silk, or wool, have during many centuries been used in the Orient, from the South of India to European Turkey, for domestic use, for the prostration of the praying Muslim, and for occasions of State. The carpets employed by the ancients are thought to have been of the nature of tapestry, and to have been chiefly used as loose coverings for couches rather than for floors. True carpets appear to have been early employed in Persia, and those called Turkish were no doubt originally of Persian manufacture, and were gradually exported and at length imitated in Turkey. Kernanshaw in Persia has still a carpet manufacture producing rich, soft, and beautiful goods, the sale of which adds considerably to the wealth of the province; while true Persian carpets are also made at Meshed in the Turkoman country and in Khorassan, and are justly renowned for the exquisite beauty of the patterns and the durability of the colours, which are purely vegetable dyes, comprising, among others, a green which is very difficult to make; it is conjectured to be a subtle combination of saffron and indigo. There is likewise a famous carpet manufacture carried on at Feraboun, near Teheran. The finest of all Persian carpets were formerly made at Herat, and one produced in the Chahal Minar at Ispahan largely exceeded in size the dimensions of the wonderful fabric at South Kensington, inasmuch as its length was a hundred and forty feet and its width seventy feet. The majority of these exceptionally vast and gorgeous products of the loom were destined either for the adornment of Royal palaces or the glorification of the holy Kaaba, or some scarcely less venerated shrine. Sometimes the entire interior of a mosque, such as that at Meshed Ali, was hung with superb carpets; and the Mihrab or niche towards Mecca was always a favourite object for such ornamentation. Mats or rugs of a much less costly nature were spread on the floors. With respect to the ordinary Oriental carpets, they may be roughly divided into two classes, the floral and the geometrical; and the former is the design affected by the higher and Aryan races, the last being preferred by the lower and Turanian races.

The beautiful Persian carpet at South Kensington may, it is to be hoped, become a most valuable factor in technical art education in this country. Some humourist once said of a Turkish carpet that its pattern resembled nothing visible in the heavens above or in the earth beneath, or in the waters under the earth; and, to a slight extent, this hyperbolical disparagement is justifiable in the case of the Turkoman carpets for which Vambery saw the old woman tracing the pattern in sand. The girls employed in carpet-weaving would obviously prick or chalk down on the particular piece of textile fabric assigned to them so much of the pattern as they were expected to weave, and these hasty sketches might in many cases deviate from the original model. Scores of workers were often employed in as many cottages in making these detached portions, which, when sewn together, may have presented a slightly mixed appearance, the incongruity of which was at the same time happily modified by the predominant traditions of design and colour which had come down to the people from remote ages. The pattern of the Ardabil carpet seems to be one perfectly distinct and regular, and, even did it present some slight obscurities, the puzzle could be easily cleared up by a careful and minute analysis and dissection of the whole work by the aid of practical geometry and conventional botany. It is curious to learn that, at the very period when Maksoud of Kashan, the slave of the "Holy Place," was completing the Ardabil carpet the manufacture of these commodities was first introduced into England by one William Sheldon, under the direct patronage of Henry VIII. The manufacture, nevertheless, was for many years exclusively confined to its use as tapestry or arras for the decoration of walls. The apartments of the palaces of Queen Elizabeth were hung with the costliest products of the Flemish looms, but her Majesty had certainly no carpets on the floors of her presence chambers or her banqueting halls. The floors were simply laid with rushes. The Oriental custom has always been and still is to employ carpets as hangings for shrines and porches, as coverlets for couches, and as rugs lying loose on the floor; and this sensible system, which has been largely adopted among us since the extension of the trade in Oriental rugs, will, in all probability, be still further developed by the technical as well as by the æsthetic teaching of the splendid carpet at South Kensington.

PREFACE.

SOME of the reasons which led the publishers to set apart a few special numbers of "The Journal of Indian Art and Industry" to Jewellery were given in Part I. (No. 96) which was issued on July 12th, 1906. In a circular, which appeared at a later date, further attention was drawn to the importance which was attached to ornaments especially to that of the human body, and some further particulars of the project were given. It was proposed to limit the scope of the work to the Indian Empire, and to the countries in political connection with its Government, and to conclude with such illustrations and descriptions of the jewellery and ornaments of past civilizations of Asia and Europe as might be thought necessary for the adequate consideration of the history of the subject and the development of the different styles.

Recognizing that the value of such a work as the present depended in a large measure upon exactness in form and colour of the illustrations, it was decided that the specimens should, as a rule, be represented of the full size, and that the utmost care should be taken in the preparation of the plates. It was also arranged that portraits of some Indian Prince or famous personage, in full dress, should be included so as to display the State jewellery of the province or district which he represented, or of some female figure wearing the national ornaments which are characteristic of her sex. No living Chiefs were to be portrayed for obvious reasons.

Ornaments which are used for religious purposes, and such as are worn by the peasantry and aboriginal tribes were to be added, and reference was to be made to processes of manufacture and to the persons who were engaged in designing and manufacturing ornaments of all kinds. As isolated numbers on jewellery had already appeared in the Journal, some repetition was unavoidable, but acknowledgment of them has, it is hoped, already been made.

It is believed that the scheme, as thus designed, has been carried out with a fair amount of accuracy, though perhaps it may be thought that in some respects geographical limits have been exceeded.

As author of the text I would like, therefore, to explain that the work is largely circulated amongst Indians, many of whom have no opportunity of seeing or of studying the jewellery of foreign countries or of past ages, and that with the facilities now afforded them it is hoped they may be in a position to add something to our knowledge of that which has formed so very large a part of the interest of both Europeans and Asiatics from the very earliest times, but the history of which is as yet so very incomplete.

Recognizing the great difficulties of the enquiry I have refrained from much speculation in the matter, but have quoted from all the authorities I could obtain so that future writers might be in a better position than myself to advance theories which they might perhaps be able to support in a satisfactory way with our illustrations. I have endeavoured to acknowledge all such information as completely as possible in the text, but I take this further opportunity on my own behalf, as well as for Messrs. W. Griggs and Sons, of thanking all those who have assisted us with so much kindness and liberality, and of begging them to excuse any accidental omissions.

I cannot conclude, however, without expressing my deep acknowledgment to Mr. W. Griggs, at whose request I undertook to write the letterpress of the work. His services to Indian Art are well known, but the conclusion of the one hundred and eighth number of the Journal presents a favourable opportunity of referring to some of them, especially to those with which I am personally acquainted.

The first number of the Journal appeared on October 1st, 1883. It was the direct result of a resolution of the Government of India in the Department of Revenue and Agriculture, dated Calcutta, the 14th March, 1883, under which it was proposed to publish an official journal.

For various reasons the Journal, although it has been published under the official patronage of the Government of India, from which it has received consistent support in the matters of material and subscribers, has, since the beginning, been brought out at the risk of Mr. Griggs, who, under many difficulties, and with very little direct pecuniary advantage, has continued the publication with unfailing regularity for more than twenty-six years.

In the Preface to the first number, Sir E. Buck, who was then Secretary to the Government of India, in the Revenue and Agricultural Department, wrote as follows:

"It is believed that a journal of this kind may be useful in establishing a higher standard of taste in Indian Art Manufactures as in serving the commercial purpose of popularizing arts, too frequently regarded as merely curiosities of craftsmanship." Having been associated with the initiation of the Journal, as well as a frequent contributor, I may, I hope, be permitted to urge that, as far as Mr. Griggs is concerned, the hopes formed by Sir E. Buck have, in my opinion, been fully realized.

On an average from ten to twelve pages of plates, several of which were usually in colour, have appeared. The text, which accompanied them, has for the most part been adequate, and for that the publisher is indebted to many experts whose services, almost without exception, have been a labour of love, to whom he tenders his warm thanks.

On their part, as well as my own, for he has magnificently rendered for me, in the Journal and in a number of Editions de Luxe of works on Indian Art, no fewer than 3,400 objects, 1,316 of them in colour, in more than a thousand plates, I tender to him our best thanks for his splendid efforts to preserve for future study the correct representation of so many examples of the Industrial Arts of the great Dependency.

T. HOLBEIN HENDLEY.

June 12th, 1909.

The Journal of Indian Art and Industry.

INDIAN JEWELLERY.

PART XIII.
ANTIQUE JEWELLERY AND ORNAMENTS, ETC. (*continued*).
GENERAL CONCLUSIONS.

In the last part of this series of articles the history of the subject was brought down from the earliest historic times to the beginning of the Christian era.

Two or three observations, however, such as Mr. Marshall's mention of the infant Eros riding on a winged sea-lion, in his article on "Buddhist Gold Jewellery" (page 161), and Dr. Stein's discoveries in Central Asia, point to the influence of the art of Greece and Etruria on that of the East. It is, therefore, not unfitting that a few more illustrations of some of the finest jewellery of that glorious age should be included in our final number. To these, in order to continue the study to our own times, have been added specimens of Roman, Byzantine, Anglo-Saxon, Mediæval, and more recent ornaments. A few portraits have also been reproduced showing historic personages wearing characteristic and magnificent jewels of the different ages in which they lived.

Lastly, as of general interest in India, permission has been accorded by the Secretary of State for India, through the kindness of Sir Douglas Dawson, the Registrar of the Central Chancery of the Orders of Knighthood, for the inclusion of the Indian Orders, Decorations, and Commemorative Medals which are in present use.

The Room of Gold Ornaments and Gems at the British Museum, from which many of the illustrations are taken by permission and with the kind assistance of the authorities, "contains a large part of the works of art in precious materials of two Departments, namely, of Greek and Roman, and of British and Mediæval Antiquities."

As the account in the Official Guide doubtless represents the latest and best views on the subject, large extracts will be made from it. The principal facts are stated in Appendix II.—Table of the Greek and Roman collections, historically arranged.

Parts of this table, taken from columns 1 to 3, are reproduced, with additions from other sources, below and at the foot of the next page.

1. Date.	2. Greek and Roman History.	3. Gems, Gold Ornaments, &c.	4. Contemporary Eastern History. "Historians' History of the World" Chart).	5. Illustrated in Numbers 106 and 107, "Journal of Indian Art."
Before 700 B.C.	Mycenæan period.	Treasure from Greek Islands; Enkomi; Ialysos; Island gems.	Assyrians invade Palestine in time of Hezekiah, 701 B.C. Destruction of Babylon by Sennacherib, 689.	Assyrian ornaments, pt. 106, 1026-1028; pt. 107, 1094. Ornaments from Enkomi, &c., pt. 106, Nos. 1034, 1035, 1041, 1042, 1043, 1044; pt. 107, 1071-5, 1076.
600		Island gems. Cameiros ornaments.	700-600, Scythian Empire founded.	
500	Solon (638-558). Peisistratos (died 527).	Scarabs and Scaraboids.	Cyrus King of Persia, 546. Darius the Achæmenian, 521. Birth of Prince Siddhartha (Buddha), 560.	Persian Collar, part 106, No. 1037. Torso of Prince Siddhartha, 1019. Early Etruscan ornaments, 1047, pt. 107, 1081, 1083, 1084.
400	Battle of Marathon (490). Battle of Salamis (480). Administration of Pericles (461-429). Peloponnesian War (431-404).	Engraved gems of best period.	Xerxes invades Greece, 480. Death of Buddha, 480.	Finest Greek ornaments, pt. 106, 1006, 1048, 1049; pt. 107, 1077, 1078, 1079. Later Etruscan ornaments (before 300?), pt. 106, No. 1045, 1088?, 1089?
300	Death of Socrates (399). Aristotle (384-322). Alexander (356-323).	Finest gold ornaments.	Alexander the Great defeats Darius and incorporates Persian and Grecian Empires, 330; invades India, 327.	Oxus Treasure, part 106, Nos. 1004, 1008, 1032, 1033, 1036. Later Greek ornaments, pt. 106, 1010, 1011?
200	(Hellenistic sculpture).	Portraits in cameo.	Asoka, 263.	Carthage ornaments, pt. 106, 1050?

The author of the Guide observes, in respect to the Mycenæan ornaments from the Greek islands that "none of these objects is of actual Egyptian manufacture, but in several cases they reflect the influence of Egyptian art." "On the other hand, they repeat themes already familiar in objects from Mycenæ, such as the elaborate spiral ornaments on the gold cup." Numerous illustrations of Egyptian work have been included and have been already fully described.

At Enkomi, near Salamis (in Cyprus), a Mycenæan site, were found, in 1896, numerous articles, amongst which were "numerous gold diadems, plain or stamped with patterns, gold mouth-pieces, earrings, rings, beads, and other ornaments, engraved stones and cylinders, carved ivories, &c."

A pendant, in pomegranate form, is covered with minute globules of gold. Nos. 1042 to 1044, Plate 146, No. 106 of the Journal, are gold necklaces from Enkomi. In 1042 there are long coils and beads of the shape of cowry (cyprea moneta) shells which are very similar to those in necklaces 1038 and 1040 from ancient Egypt. These seem to indicate a connection with the South of the Persian Gulf. The coil ornament is found in a necklace of the late Etruscan period, and the beads in 1043 and 1044 are very similar to many which are used in India at the present day, as for example in modern silver ornaments at Jeypore.

Five specimens of parts or the whole of some Enkomi diadems will be found in Plate 156, Nos. 1, 2, 3, 4, and 5. The patterns are embossed or stamped in a manner which is common in India, especially in Western Rajputana. Spiral designs of different kinds will be noted in 1 and 2. The spiral ornament, which is so well marked in Nos. 1 and 2 in the British Museum Guide to the Antiquities of the Bronze Age, was first used in the Greek Islands that is at the period between 2500 and 2000 B.C. It indicates Aegean influence. The writer states that "starting in ancient Egypt, where it was a common form of scarab decoration under the twelfth dynasty, it first reached Crete some time before 2000 B.C., and was especially employed in the decoration of steatite seals; from Crete it spread to the islands and the mainland, where it is found on neolithic pottery at the pile-station of Butmir in Bosnia; thence it followed the amber route along the Moldau and Elbe to the North Sea shores of Jutland, and thus found early entry into Scandinavia. . . . It penetrated into the British Isles quite early in the Bronze Age, possibly by way of Spain."

The spiral will be found on a Madras filigree brooch, Plate 90, No. 601, on which I note that Mr. Havell remarks that "the spiral form is met with in Etruscan and other prehistoric jewellery and metal work of Europe, and that the spirals probably represent the coils of a serpent, and that the workmen found how easy it was to cover a large surface quickly by a series of spirals." Spirals are used in 491 and 494, Plate 78, examples of Abyssinian filigree, and in other work of the same class, in which the material seems to invite its use, but this is a very different thing from its employment as surface embossed ornament, where it is apparently not always required merely to fill up space; on the contrary, it seems to be a characteristic and probably symbolic ornament.

The embossed ornaments like the floral sprig on No. 1074, Plate 157, are very interesting, especially in India where the use of such a design is almost universal on textiles in diaper and other patterns. The winged human-headed figures like sphinxes of No. 1072 open out a long enquiry of much interest which would take long to describe and be out of place here. Similar figures are employed in seventh century ornaments from Cameiros, in Rhodes, also in the gold room. No. 1075 represents palm trees with horned animals. It is a very early attempt at a picture for use as an ornament. There is an ivory box from the same source with reliefs of hunting scenes and of a pair of ibex standing on each side of a sacred tree, perhaps the same as in No. 1075. This box, according to the Guide, is the most remarkable specimen of its kind yet found. It has

1. Date.	2. Greek and Roman History.	3. Gems, Gold Ornaments, &c.	4. Contemporary Eastern History. "Historians' History of the World" (Chart).	5. Illustrated in Numbers 106 and 107, "Journal of Indian Art."
100	Roman Conquest of Greece (146).	Portraits in cameo and glass paste.	Græco-Bactrian Dominion in Indus region begins 178.	
1 B.C.	Julius Cæsar (100-44). Augustus (63 B.C. to 14 A.D.).	Cameo of Augustus. Portland vase.	Era of Vicramaditya begins 57 B.C. (Still current.)	
1 A.D. 100	Tiberius (42 B.C. to 37 A.D.). Romans conquer Britain, 43-84). Destruction of Pompeii (79).	Græco-Roman gems.		Græco-Roman? reproductions, &c., pt. 106, 1055, 1056.
200	Hadrian (76-138).	Later Roman gems and jewellery.		Roman ornaments, pt. 106, 1001, 1005?, 1008, 1046; pt. 107, 1080, 1085, 1090, 1091, 1092, 1097, 1103.

several affinities with ivory reliefs from Assyria about 800 B.C. No. 1076 is a magnificent necklace from tomb 93 at Enkomi. It is made up of gold bars which are united by four rows of beads and wire coils. In the centre are polished oblong and other beads of carnelian, &c., which are very similar to those found in Egypt, and on old sites in Rajputana and the United Provinces in North India. The necklace, with very little change, might easily be modern Indian.

The Museum contains Archaic and early Etruscan ornaments, from the seventh to the sixth century before Christ, "in which the process of employing minute globules of gold to form patterns or otherwise to enrich the design is carried out to a very great extent." No. 1081, Plate 158, is one of the finest examples. It is a magnificent gold necklace of jewelled and gold ornaments suspended by a network of chains from a band of chains. Such bands are in common use in Western India at this day. No. 1080 of the same plate is an Egypto-Roman necklace (Frank's bequest) with a similar band of chains, thus carrying on the style of work many centuries later.

By far the most interesting objects in the gold room, for purposes of comparison with the jewellery of all ages and countries, are the Greek gold ornaments of the first period or about 420-280 B.C., of the age of Socrates, Aristotle, and Alexander, when the Tanagra figures were produced and the mausoleum and great temple at Ephesus were built. It was at this time that India and Greece came so closely into association in connection with the raid of Alexander the Great into the former.

The author of the Guide writes as follows:—"The figures have for the most part been made by pressing thin gold plates into stone moulds. Instead of the Etruscan globules fine threads of gold (filigree) are here employed with an extremely delicate effect. The process of enamelling frequently occurs, but the enamel is always in very small quantities, as may be seen in the beautiful necklace from Melos." Exquisite examples of this age will be found in Plates 147, 148, 158, and 159. Moulds, filigree, and enamel are known in India, but it must be admitted that their application, even in modern times, is far behind that of the splendid examples of the remote past. No. 2, Plate 157, shows besides the Indian chain a characteristic illustration of the use of hollow pomegranate beads to keep the chains together. Some of the productions of Brogden, Castellani, and Guliano are quite equal to the ancient Greek or Etruscan originals, and prove that the modern master-craftsmen or artists are as great adepts as the men of old. Truly great art is of no age or country. Specimens 1094 and 1096, Plate 160, a bracelet made in the nineteenth century by John Brogden with Assyrian applied figures, and another from Egypt of about B.C. 966, may be compared in this connection. Figure 1095, Plate 160, a pendant, representing a king of the nineteenth Egyptian dynasty or a little later (fourteenth to thirteenth centuries B.C.) seated upon his throne, is a beautiful illustration of the use of gold damascening and pastes. This was the glorious age of the Ramessides.

In the article on jewellery in the Encyclopædia Britannica the extraordinary aptitude of the ancient goldsmiths is admitted. We read that "the workmanship is often of a character which modern gold workers can only rival with their best skill, and can never surpass. The granulation of surfaces practised by the Etruscans was long a puzzle and a problem to the modern jeweller, until Signor Castellani, of Rome, discovered gold workers in the Abruzzi to whom the method had descended through many generations, and by inducing some of these men to go to Naples, revived the art, of which he contributed examples to the London Exhibition of 1872, successfully applied to modern designs."

I might mention that a lady asked me in India if I could get an ornament of the kind which had been made by Castellani repaired and parts replaced, as she had been unsuccessful in her efforts to get the work done in Europe. It was satisfactorily effected in Jeypore. The following are further interesting notes from the Encyclopædia Britannica:—

"Amongst modern Oriental nations we see almost every kind of personal decoration, from the simple caste mark on the forehead of the Hindu to the gorgeous examples of beaten gold and silver work of the various cities and provinces of India." In the jewellery of the Egyptian queen, Aah-hotep, "we find the same ingenuity and perfect mastery of the materials as characterize the monumental work of the Egyptians. "Hammered work, incised and chased work, the evidence of silvering, the combination of layers of gold plate, together with coloured stones, are all there—the handicraft being complete in every respect." "Crosses, and stars formed of combined crosses, with crosses in the centre forming spikes—all elaborately ornamented in detail," were found by Dr. Schliemann, at Mycenæ and Hissarlik. Spiral pins of twisted wire were common. Many of the ornaments were perforated for attachment to clothing. Rosette ornament in repoussé was found there, and in Assyrian work. At Hissarlik were found diadems or fillets with pendants formed of thin diamond shaped plates attached to rings by double gold wires. Small figures, probably of idols, were also suspended from them. It is assumed that they were worn across the forehead, the longer

pendants falling down each side of the face, or they may have been veils worn by the priests. Greek, Etruscan, and Roman ornaments partake of very similar characteristics—"Fretwork is a distinguishing feature of all, together with the wave ornament, the guilloche, and the occasional use of the human figure."

Do we know much of the arts of India from the writings of Europeans in addition to what was stated on pages 117 and 118? Mr. J. W. McCrindle in his account (1877) of "Ancient India as described by Megasthenes and Arrian," states that no reference is made to the metals which were employed in making articles of art for use and ornament. The Indians so far showed the value of artizans by putting to death anyone who caused one of them to lose his hand or his eye. Again, it is stated that "when the philosophers have passed their student days they retire to their property and live in ease and security. They then array themselves in fine muslin, and wear a few trinkets of gold on their fingers and in their ears." In a translation of part of the Indika of Arrian (end of the first century A.D.), according to McCrindle, we read that "the Indians wear also earrings of ivory, but only such of them do this as are very wealthy, for all Indians do not wear them."

The Indo-Bactrian sculptures found in the Punjab, many of which are in the Lahore Museum—particularly one of King Azes, who ruled about 30 B.C.—show ornaments of a high class.

Our illustrations and descriptions continue the story of jewellery, as regards India, through the times of Buddhist supremacy and decay, as well as through the long ages in which the influence of Hinduism has always been widely felt, if it has not at all times been dominant. For the former we have a carved figure of a Bodhisatwa or King (pl. 50-325) from Jamalgarhi; another more wonderful torso of Prince Siddhartha (Buddha) with its beautiful ornaments, dating from about B.C. 260-250 (pl. 142-1019); many details of ornaments from the sculptures at Sanchi in Bhopal (pl. 76-468 to 479) in the first century of our era. Others from Amravati; others of greater refinement (pl. 77-480 to 490), A.D. 200 to 500; and the more ornate and artistic examples from Orissa temples (pl. 102-693 to 703, and pl. 103-704 to 719), dating from about the seventh and eighth centuries of our era. The paintings from the caves of Ajanta (pl. 61-391 and pl. 62-392 to 401) representing jewellery of very varied and sumptuous character, may date from a century or two B.C. to six or seven centuries A.D. For the latter, the Indian god Vishnu as Surya—the sun god (pl. 50-326), and the still finer images of that god of the twelfth or thirteenth centuries A.D. (pl. 143-1021), and a figure of the fifteenth Jain Lord (pl. 143-1021); both from the Indian Museum. For comparison, and to show the universal love of personal ornaments, we have included such figures as that of the lady Akmé of Palmyra (pl. 51-327) and another of the wife of Rabb-el-Yarha of the same place (pl. 52-328). They lived between B.C. 200 and A.D. 200.

We are now prepared to consider what travellers tell us, and first comes Marco Polo, the great Venetian.

In the story of his travels, by Colonel Yule (edited by Cordier), we find most interesting notes on Jewellery in Upper Asia and India. When Marco Polo and his father and uncle returned from the East, their relatives and friends had some difficulty in recognizing them. Ramusio, in his preface to the book of Marco Polo, tells how they dispelled these doubts by bringing out the three shabby dresses in which they returned from their travels and ripping up the seams and welts, took out of them jewels of the greatest value in vast quantities, such as rubies, sapphires, carbuncles, diamonds, and emeralds, which had all been stitched up in those dresses in so artful a fashion that nobody could have suspected the fact, for when they took leave of the Great "Can" they had changed all the wealth that he had bestowed upon them into this mass of rubies, emeralds, and other jewels, being well aware of the impossibility of carrying with them so great an amount in gold over a journey of such extreme length and difficulty. Kublai Khan, their patron, the grandson of Chinghiz Khan, ruled from 1260 to 1294 over the Moghul Empire.

Tabriz was a great market for precious stones. Ibn Batata (60 years after Marco) says: "I traversed the bazaar of the jewellers, and my eyes were dazzled by the varieties of the precious stones which I beheld. Handsome slaves, superbly dressed and girdled with silk, offered their gems for sale to the Tartar ladies, who bought great numbers." There were mines of Balas rubies in Badakshan. They were the property of the king, who sold or parted with only a sufficient number to keep up the price. They were really in the Ghâran country, on both banks of the Oxus. The produce is small. There are also mines of lajward (*lapis lazuli*). In Pashai, perhaps Chitral (Yule) the men wear earrings and brooches of gold and silver set with stones and pearls. There is a remarkable stone at Samarkand, the kok-tash, or green stone, on which Timur's throne was set. Tradition says that, big as it is, it was brought by him from Brusa; but tradition may be wrong. Jasper and chalcedony were found in the province of Pein. According to Yule they are "probably only varieties of the semi-precious mineral called by us popularly jade, by the Chinese yü, by the

Eastern Turks kash, by the Persians yashmi, which last is no doubt the same word with the Greek "*iaspis*," and therefore with jasper. The jade of Turkestan is largely derived from water-rolled boulders fished up by divers in the rivers of Khotan, but it is also got from mines in the valley of the Kara-Kash river. Kublai rewarded his barons by promotion, presents of fine silver plate, and others rich appointments, fine jewels of gold and silver, and pearls and precious stones, and tablets of authority higher than they had before. The latter were made of silver or gold or silver gilt. The Khan had buildings to contain his treasures of gold, silver, gems, pearls, and gold plate. On the birthday of the Great Khan he dressed in the best of his robes all wrought with beaten gold, as did all his barons and knights except they were not so costly. Every man so clothed had also a girdle of gold, and this as well as the dress was given him by the sovereign. "And I will aver that there are some of these suits decked with so many pearls and precious stones that a single suit shall be worth full 60,000 golden bezants. Thirteen times in the year the Great Khan presented to his braves and knights such suits. On new year's day all were clothed in white, and all the people of all the provinces and governments and kingdoms and countries that own allegiance to the Kaan (Khan) bring him great presents of gold and silver, and pearls and gems, and rich textures of divers kinds."

In the province of Anin (probably S. Yunnan), the women wear on the legs and arms, bracelets of gold and silver of great value, and the men wear such as are even yet more costly. In the island of Chipangu (Japan) they have also pearls in abundance, which are of a rose colour, but fine, big, and round, and quite as valuable as the white ones. When a body is burnt they put one of these pearls in the mouth, for such is their custom. They have also quantities of other precious stones. Such pearls were perhaps also most highly esteemed in old India, for red pearls form one of the seven precious objects which it was incumbent to use in the adornment of Buddhistic reliquaries, and to distribute at the building of a Dagoba. In the island of Seilan (Ceylon) rubies are found, and in no other country in the world but this. They find there, also, sapphires and topaze, and amethysts, and many other stones of great price. He gives a description of pearl diving on the Coromandel Coast. The king, like his subjects, wore nothing worth mentioning, except that round his loins he has a piece of fine cloth, and round his neck a necklace entirely of precious stones—rubies, sapphires, emeralds, and the like, insomuch as this collar is of great value. He wears, also, hanging in front of his chest, from the neck downwards, a fine silk thread string with 104 large pearls and rubies of great price. "This was a rosary bequeathed to him by his ancestors. He also wears on his arms three golden bracelets thickly set with pearls of great value, and anklets also of like kind he wears on his legs, and rings on his toes likewise." In a note Yule observes, no doubt correctly, that the number of beads should be 108.

The mode of obtaining diamonds from inaccessible deep valleys near the Kistna River by means of eagles is described. (The Rukh or Roc, page 414, vol. II.) The people of Gujarat are the most desperate pirates in existence, and one of their atrocious practices is this. When they have taken a merchant vessel they force the merchants to swallow a stuff called tamarindi, mixed in sea-water, which produces a violent purging. This is done in case the merchants, on seeing their danger, should have swallowed their most valuable stones and pearls, and in this way the pirates secure the whole.

The travels of Marco Polo, the Venetian, naturally lead to the consideration of several important questions. First of these are the influence of and reaction upon Indian art of the school of Byzantium or Constantinople, and of Venice and North Italy, where that school was so predominant. The second is the great diffusion of ideas between the East and West which arose on account of the trade connections between the North Italian ports and the Orient, through Constantinople and Higher Asia, as well as by the more direct routes, chiefly through Egypt, Syria, and Persia.

Let us see what Bayet, in his "L'Art Byzantin," has to say on the subject: "At Ravenna we find the most beautiful mosaics of this period. Nothing of this kind equals the decoration of the apse of San (Saint) Vitale. As soon as one enters, the attention is riveted upon the great compositions of historic interest—on one side, Justinian surrounded by dignitaries and guards; on the other, Theodora, attended by the ladies of her court, offer presents to the Church. The empress has emerged from the entrance hall, where there is the sacred fountain, while a single servant raises before her the curtains which are hung at the door of the temple. Her costume is splendid; broad embroidery which represents the Adoration of the Magi adorns the hem of her robe; jewels cover her chest. Down from the hair hang upon the shoulders fringes of pearls and gems; a high diadem crowns the head, which is surrounded by a nimbus. It is a living reproduction of the past—these figures drawn up in rank full-faced before us; these women with regular features, their fine fixed eyes, their uniform attitude, the splendour of their costumes, present such an image of the Court of Byzantium that one cannot forget, so rich and elegant as it is, and one in which a minute etiquette is

all powerful." One of these historic pictures has been selected for illustration, that of the Empress and her court in colour, to serve as a connecting link between the East and West.

The Byzantine artists were well acquainted with enamelling. Several of the doors of St. Sophia, in Constantinople, were enamelled. This was without doubt champlevé enamel. In the tenth century chemistry enriched this chromatic palette and gave to the flesh marvellously natural flesh tones instead of a milky white. The tenth and eleventh centuries represent the golden age of enamelling.

The following notes, which are taken from modern writers, indicate their opinions on Indian jewellery and its place in the history of the subject; comments are made where necessary :—

Mr. Cyril Davenport's work on jewellery, one of the series of "Little Books on Art," of which he is the editor, is full of most valuable and interesting information. There are many references to India. He thinks the facetting of hard stones originated there and is especially eulogistic on the great beauty of Indian necklaces, both ancient and modern, adding that it is probable that the best patterns made to-day only perpetuate old traditions. The illustrations of the present series of articles seem conclusively to support his views. It is not certain, however, that he is so correct when he asserts that "the ubiquitous bead does not play so important a part in Indian necklaces as it does in those of most other countries, but of course it has its place, but is more or less subservient to plaques and set patterns."

He says "the characteristic beauty of the Indian necklaces seems to me to consist in masterly design and the clever use of enamels, the stones used are generally of poor quality and badly cut. I think that the most beautiful composite necklaces must be looked for among those from India, but the most beautiful consisting of gold will be found among the ancient Greek."

Very few Indian gold necklaces, according to my observations, are enriched with enamel which have not been made in recent times, either at Jaipur or Delhi, but the vast majority of the most valuable of such ornaments, as our portraits and illustrations prove, are composed of polished gems with little gold setting. The reason seems to have been that they were usually convenient modes of storing capital, and little loss was involved in making them up as compared with cutting and elaborately setting the stones. The most interesting designs are undoubtedly those which are enriched with flat slices or lasques of precious stones, or which are made of gold, silver, and even base metals, of which many examples are shown. The latter, however, are usually worn by the poorer classes.

Mr. Davenport thinks the most beautiful gold earrings are to be found amongst the Etruscans, and for gold combined with jewels, among the Indians. Both are represented in the Journal. As regards the rings, and his remarks that it is difficult to understand how they can be worn with any degree of comfort, and that their use is practically dying out, my experience differs from his. I rarely heard anyone complain of inconvenience, nor does there seem to be any falling off in their use except amongst the very few wealthy ladies who come in contact with Europeans, and of these the Parsees never wore the rings. Noserings are also a necessary proof of marriage in most classes.

Mr. Davenport writes very appreciatively of Jaipur enamel and "its beautiful crimson (red) which has long been known to be due to the presence of gold in the glass, and then a very careful and peculiar method of firing. Indian work is also noteworthy because of the remarkably skilful and effective use of pearls, and armlets are often made of gold strung with several rows of coloured stones, flexible and very decorative." The exact method of producing the Jaipur red is, however, still a secret.

I am glad to be able to support so many of Mr. Davenport's conclusions by such a large number of illustrations of Indian jewellery.

All lovers of the beautiful must agree with Mr. Davenport in the hope that designers will be induced to realize that there is much truer art satisfaction to be found in beautiful coloured stones, cut *en carbochon*, and set lovingly among little hammered sprays of foliage, or delicate edges, and supports with enamels upon them, such as Cellini (1500-1571) and the numberless Renaissance jewellers loved and produced with such admirable results.

We are glad to note the beautiful productions of some French and English art workers, and to see that artists, as in the days of Ghirlandaio (1449-1494) and Botticelli (1447-1510), who had been jewellers, and of the great master Benvenuto Cellini, who, though a jeweller, was a real artist, are turning their attention to this beautiful work. In a foot-note to page 241 of the catalogue of the pictures in the London National Gallery the very significant statement is made that a goldsmith was often familiarly termed *ghirlandaio*, "as one of his chief occupations was the manufacture of those rich coronals (ghirlande) then in favour with the unmarried and newly-wedded ladies of Florence."

We can then hope with him that beautiful pendants and ornaments for the hat or clothing may once

more be produced in profusion, but this will never be the case until jewellers cease to subordinate the setting so entirely to the stones as to make it only a means of holding the latter together, or until wearing jewellery is no longer a mere means of display of wealth. We speak somewhat contemptuously of the Oriental use of ornaments for the safe storage of capital in uncertain times, but say little of the somewhat vulgar display of mere heaps of pearls and diamonds, in what are often less beautiful forms, in Europe.

Mr. Davenport writes of the vulgar taste which encourages the ready sale of such jewelled bits as cycles, bats and balls, in the form of brooches and pendants.

Such objects are sold in large quantities to tourists in the Indian Capitals, and were produced, under European inspiration, in the garnet works—but not in the jewellers' workshops in Jaipur—thus rapidly vitiating taste and production even in art centres. One object of the articles in the Journal of Indian Art and Industry is to benefit both jewellers and purchasers by illustrations of real native designs.

Mr. Davenport refers to tattooing as one of the earliest forms of ornament, and to the decoration of the teeth among savage tribes. The former prevails, as is well known, in Burmah, where the designs are most elaborate, and the people are certainly not savage. In India, as I have already noted, some of the front teeth are frequently, especially amongst *baneahs* of the mercantile class—both men and women, marked with a little gold stud, or perhaps in the females with a gold plate, with the idea of having a little of the precious metal in the mouth at death.

Mr. Davenport has a number of interesting observations on wire work amongst primitive people such as the Rhodesians, on filigree work amongst the Ashantis, on granular work amongst the early Etruscan jewellery, the finest jewellery in gold, though the best designs are among the early Greek work. He also appreciates the revival of jewelled dresses. In India there are many examples of this use, such as the beautiful state dresses at Alwar, one of which has been illustrated in Part I., No. 95. Moreover, the free use of the brocades of Benares, Ahmedabad, and elsewhere, of gold lace of extraordinary variety of design, of spangles of gold and silver, of even beetle wings, and other glittering materials throughout their country prove that the Indians have always loved brightness and glitter in their dress, of which the precious stone is but one mode of expressing the same ideas.

Mr. Davenport, in writing of a necklace from Egypt with very curious pearl pendants, which is now in the British Museum, specially refers to the small flat circular discs of gold, which are set at short intervals. Each disc has a small circular piece cut out of its lower part, and to the upper part of this link a fine wire is soldered. The loose end of the wire is then run through a pierced pearl, and the still projecting end of the wire tightly pressed down (Pl. 159, No. 1087). This loose end could not be soldered because it would have injured the pearl, but the skill of the jeweller must be admired because it looks as if the pearl had been soldered in. There is a pendant of little Egyptian models in green glazed porcelain. Mr. Davenport believes that the earliest pendants were worn as charms. Such is a very common use in the East, where tiger's claw amulet cases are universal. Many of our illustrations prove this, but there are other cases in which the pendant is only a beautiful ornament. The swastika, or Fylfot cross, or Thor's hammer, which is so universal, and is regarded by Mr. Davenport as of astronomical origin, sometimes appears. It is in India a symbol of Shri or Laksmi, the wife or female essence of the Hindu God Vishnu, and represents good luck or good fortune. It may be occasionally used in jewellery, but is most often marked on the person or on various objects to bring good luck or avert inauspicious influences. It is an ornament of the Bronze Age. An old Roman bronze brooch (one leg broken) from the British Museum appears in our illustrations. It has been supposed to represent the motion of the Heavenly bodies or of the Sun alone, and if the arms are reversed, to invoke the powers of evil or to bring bad luck.

A very beautiful Greek gold pendant in the Victoria and Albert Museum, of about the third century B.C., from Taman is also reproduced. Side by side with the thin leaf imitation diadems from Tinnevelly, specimens from the British Museum are shown, some of which, being of the thinnest material with embossed ornament—probably produced by pressure in stone moulds—may have been made for funeral purposes only, while the others and most magnificent were perhaps worn by the person in whose grave they were found.

Mr. Davenport states of the diadem, that it has the longest and most consecutive history of all objects of the jewellers' art, and it is of special interest as the one from which crowns and coronets are derived.

The repoussé examples reproduced from the originals in the gold room of the British Museum were found in Tomb 93, at Enkomi, Cyprus, and the last is a diadem ornamented with filigree which was found in 1865 at Santa Eufemia, in Calabria. The former date from the Mycenæan period, before 700 B.C., and the latter from the fourth century B.C., the first Greek gold period (420-280 B.C.). Most of these are reproduced in Nos. 106 and 107 of the Journal of Indian Art.

The flat circlets of steel in the form, as he says, of bracelets, which Mr. Davenport refers to as weapons, are usually placed in the headdress of the Akalis, a sect of Sikh ascetics; they are really quoits and can be used with deadly effect. They are hardly to be classed as ornaments. The base-metal bracelets are much more widely distributed than we suppose.

Davenport says, "small pieces of carnelian, amethyst, agate, and onyx were carved and cut for making seals at a very early date," for example, in the case of the Egyptian scarabæus, the Assyrian cylinders of hematite, or the Mycenæan seals cut in amethyst.

"After the exquisite taste of the Greek and Etruscan jewellery, Roman work appears at a disadvantage, the gold work is heavily designed and heavily worked, but there is a certain power which is wanting in the more refined work of the Greeks."

"The stones known as 'precious' are crystallised aluminium, and very hard. To this class belong the ruby, sapphire, emerald, spinel, some kinds of garnet, and the stones called by the prefix Oriental, as Oriental topaz and Oriental amethyst." The other large class of stones used in jewellery are softer, but still hard, and are varieties of red and crystal—quartz—coloured in the same way as the precious stones, with metallic oxides.

The commonest stones in this class are perhaps agate, carnelian, amethyst, jasper, cairngorm, sardonyx, and chrysoprase. Such stones are only valuable because of the trouble of cutting them, and because of the more or less beautiful colours they may show.

"Professor Flinders Petrie found undoubted examples of fine soldering on some of the earliest pieces of jewellery he ever found."

"Soldering with the blow pipe is indeed the keynote of all true jewellers' work."

"Draw-plates of agates have been found amongst very ancient ruins, or of hard stone, but square-section wire can be easily cut off the edge of a sheet of metal and be hammered or filed into round wire."

Mr. J. De Morgan found in 1894, at Dahsur, ornaments of exceptional beauty of early Egyptian work, though posterior, it is thought, to Dr. Petrie's specimens from Abydos, which showed very early skill. Amongst the latter were found some wonderful bracelets from the tomb of Queen Zer. They were all "bead" bracelets (see Plate 126, 854-855).

The most important of the bracelets is composed of alternate plaques of gold and turquoise, with inscriptions and the figure of a hawk.

The Dahsur jewels show great powers of design and complete mastery of technique, both in the arts of the goldsmith and the lapidary.

"Of Scythian work, about the third century B.C., we find the solidified form of necklace known as the *Torc* (or torque) in a very decorative form." They are widely distributed from Rome to Britain in unbroken succession.

"Among the Romans, torques were given as military honours." He adds, that it seems to be difficult to distinguish torques and bracelets or armlets.

The gold used in the Etruscan ornaments is thin and was pressed cold into ornamental moulds cut in stone. Two or more pieces were soldered together when necessary. On many of these ornaments there is found the wonderful granulation in gold which the Etruscans alone have been able to make of such fineness that no modern workman can equal it. "The beauty of the early Greek jewellers' work is unsurpassed." They did not entirely ignore the beauty of cut stones.

The Romans were, however, partial to the setting of jewels. The peculiarity of their work was that the upper edge of the enclosing metal band was always kept broad instead of being attenuated as much as possible.

Enamels were not much used by the Romans, but coloured pastes were inlaid in hollows left or cut in the gold work.

"The embossed ornamentation on Mycenæan, Trojan, Greek, and Etruscan diadems of thin gold is often of great beauty."

"In Burmah and India decorative plaques are fastened to the hair just over the ears, and these look like, and often pass for, earrings. It is supposed that a similar arrangement was in vogue in Greece, Etruria, Rhodes, and Cyprus."

"In Assam they (earrings) are worn of great size, made up of stained grasses mixed with goat's hair wound closely round a core of thin wood. In Tibet large plates of silver are fastened to the ears and ornamented with streamers of coloured grasses."

"The Tara brooch is, altogether, the finest example of the annular brooch with a long pin." The chain is of the closely interwoven pattern known as "Trichinopoly," "quite smooth like a small snake."

"In this remarkable brooch we find gold tracery and filigree of equal beauty with the Greek work of a still

earlier period, but which is not likely to have been seen by Celtic jewellers, translucent enamels made at a period when Byzantine workmen could only produce such enamels, moulding in glass quite equal to any of the Grecian Roman plates, chain making which could only have been equalled by Indian jewellers, and a skill in designing, casting, finishing, and chasing metal which is quite equal to that of any nation or period." There is nothing like it in India.

Japan can have had little or no influence upon India in the past, but it is worth referring to it on account of the identity of some methods. Mr. Dillon in his work on "The Arts of Japan" (1906) remarks that the dolmen builders, whose tombs date from early pre-Buddhist times, that is, before the fifth and sixth centuries of our era, "made large use of armilla and other ornaments of copper sheathed with gold The place of jewels was taken by the curious 'comma,' or tadpole-shaped *magatama* of agate, jasper, steatite, or other stones, and by beads of glass, either round or angle-shaped. In their love for such ornaments these early folk differed essentially from their descendants. The Japanese in historic times—and this holds true of both sexes—have never favoured the use of chains, rings, and other forms of jewellery. The glass beads I should be inclined to regard as imported from the continent, but in this opinion I am in opposition to some of the best authorities."

This is the more remarkable in that the Japanese stand pre-eminent among all other nations in the treatment of metals.

"The process of casting in a mould, built up upon a model of wax over a core, the cire-perdue process of the Renaissance artists, has only been practised for some twenty years in England, but in Japan it would appear that the art has been known for ages." In Part III. of these articles it will be remembered that it was stated that this process is employed in certain parts of India for making anklets. Enamelling, both cloisonné and champlevé, are practised, also damascening with wire as in the Tah-i-nishan work in India (true), or "as in the Azziminia work of the Italians and Sikhs in which the iron foundation to be decorated may be roughened, and a foil of gold or silver hammered on to the hatchings so produced."

Enough, perhaps, has been written in these papers upon the use of ornaments as a means of storing up capital, but a few words may be added in reference to this being perhaps the cause of the rudeness of workmanship of many Indian specimens, especially those which are worn by the poorer classes.

To spend much money upon the actual jewellers' or goldsmiths' labour would defeat the main object of the people, which is, to put by safely as much of their savings as possible with the least possible loss when they are required for reconversion into coin. This cannot be done unless the work is of a simple character. Moreover, elaborate articles, especially where there is much detail and the workmanship is fine, involve injury and loss, particularly when the females who wear most of the jewellery have to labour in the fields or in their homes.

The difference between buying and selling is in no case more seriously felt than where jewellery is concerned. The following extracts from Harmsworth's "Self-Educator" give some idea of the percentage of profit which is considered necessary to enable a jeweller in England to live.

"In reference to profits in general, it is not wise to run under 33⅓ per cent., and get 50 per cent. if possible. One must bear in mind the nature of the trade. Jewellery is not a necessity of life where you are sure of a certain turnover day by day, and, as we have stated, it is the first trade to suffer from general or local depression."

When dealing with Europeans and with great princes, there is no doubt that Indian jewellers, or, perhaps more correctly, the brokers or dealers, charge for jewellery of the better kinds on a scale not very far behind that of their European brethren, but such terms would not suit the poor nor are they applicable to the more common ornaments, and especially not to those which are made without gems.

The ordinary charge for such work varies from half an anna or from one to two annas per rupee weight, that is from about 3⅛ or 6¼ to 12½ per cent.

The English daily papers recently referred to the surprise which the Sultan of Morocco is said to have felt when he endeavoured to raise money upon his jewellery for which he had paid hundreds of thousands of pounds, but for which he discovered he could only obtain as many tens of thousands.

The correspondent of *The Times* wrote from Tangier, Morocco, on November 10th, 1907, that "The Sultan's disappointment is bitter to find that he can raise a very small sum on his jewels. The difference between the valuation recently made in Paris and the original price paid leaves a margin of profit for the purveyors of about 900 per cent. in spite of the rise in the price of jewels in these last few years."

Such shocks, it is feared, are often experienced in the East, especially by potentates whose purchases are made with the assistance of many persons, who all expect a commission from the dealer before the bargain is complete.

Such an experience as the above would be impossible in India in the case of jewellery of Indian design

and make, where the principal object with all investors in such property is its value as capital. Instances do of course arise of credulity, fraud, and deception, but not on such a scale as this.

The Chinese guild law or custom, which requires that plain flexible rods, or bands, of gold and silver which are worn round the neck or arm, and which must be made by the jeweller of pure metal, without alloy, and stamped with the name of his shop, must be redeemed by him at any time without questioning the quality of the material, would best suit the Indian.

Gaston Migeon, Professeur a l'école du Louvre, in his "Manuel D'Art Musalman," 1907, has a few observations on jewellery. He illustrates, however, some brooches or pendants which were found in tombs in the Caucasus, and are now in the collection of M. Massonneau. They are in gold repoussé and carved. In shape they are rhomboidal plaques having the peculiar carved outline of the enamelled ornaments, illustrated in Nos. 96 and 97 of these articles (No. 112, Plate 15, and No 193, Plate 27). The winged griffins facing each other which are represented upon them "recall," he adds, "the motive in the style of the fabrics," especially it seems those which show Sassanian and Byzantine influence. He remarks on the perpetuation of forms without their evolution being perceptible, and in some districts upon the very composite character of much of the jewellery, though it differs little from that which is met with in Nearer Asia, Syria, Arabia, and in all the Turkish provinces. This universality of style and form appears to justify me in including, for comparative purposes, specimens from some of the countries outside India in my illustrations. He has a striking observation with regard to the representation of human figures and of animals on the coins of the Turkoman Dynasties which founded brilliant kingdoms in Central Asia, Asia Minor, &c. He considers that this was not due to religious indifference, but to the necessity of having a suitable medium of commerce with the European merchants of the Mediterranean who entered with so much activity after the Crusades into commercial relations with the principalities of Higher Asia. He is struck with the remarkable coinage of the Moghul Sultans of India, and especially with the horseman at full gallop on the money of Tourakina. He writes as follows: "But the beautiful numismatic chefs d'œuvre are the delightful gold coins of Jehangir, upon which are struck animals and figures which are perfect in design, and have a relief which is most accurate and clear." The Zodiacal series of coins are no doubt referred to, and it is certain that artists who could do such beautiful work had the skill to produce most exquisite jewellery. It was from this period that the choice old carpets which are now in India date, and they, too, if not Persian, show clearly the influence of that country especially in regard to animal representations. Mons. Migeon shows clearly enough that the affirmation of some old historians of Mussalman art, that the people of Islam have never represented living forms on account of Koranic prohibition, is false, not only literally, but because it is contradicted incessantly by the monuments. It seems to be true only of the more fanatical and puritanical followers of the Prophet, so that we can never be surprised when we see this motive employed in Mussalman arts. In like manner the Koranic or traditional prohibition of the use of jewellery is more honoured in the breach than in the observance, especially amongst women.

There are a few interesting references to jewels in Mr. Stanley Lane-Poole's "Mediæval India under Mohamedan Rule (A.D. 712-1764)." Mahmud of Ghazni (998-1030) defeated Jaipal, the Brahmin Rajah of the Punjab, and the chief and fifteen of his kindred were brought captive before the conqueror. "Their jewelled necklaces, worth, it is said, ninety thousand guineas apiece, were torn off."

The rajahs and wealthy men of India were wont to store their treasure in the fortress of Kangra (Nagarkot) "deemed impregnable by mortal power"; but Mahmud blockaded it with success, and "immense stores of treasure and jewels, money, and silver ingots . . . were among the prizes of the Holy War." The booty was displayed in the court of the palace at Ghazni, "jewels and unbored pearls and rubies shining like sparks or iced wine; emeralds as it were sprigs of young myrtle, diamonds as big as pomegranates! All the world flocked to Ghazni to gaze upon the incredible wealth of India." This event, the renown of the fortress, and the prowess and wealth of the rajahs of Kot Kangra are still spoken of in North India; and truly, in mediæval times, the situation of the fortress above deep ravines, as I can testify from having seen the present buildings a few years ago, justified the ideas in regard to it.

It was Mahmud also who, in his final raid, sacked Somnath and destroyed the famous lingam or emblem of the god Siva, "A rude pillar-stone adorned with gems and lighted by jewelled candelabra, which were reflected in the rich hangings, embroidered with precious stones like stars, that decked the shrine." In a foot-note Mr. Lane-Poole ridicules, as others have done, the legendary statements that Mahmud cleft the stone in twain, revealing the treasure of jewels within, but thinks they may have been stored in a hollow within or at its base when Khwaja Ahmad Hasan Maimanda, Prime Minister in the luxurious court of Mas'ud, the successor of Mahmud (1030-1040), was restored to office after the death of the latter with

extraordinary marks of respect. On his re-entrance at the levee "he was dressed in scarlet cloth of Baghdad embroidered with delicate flowers, and wore a large turban of the finest muslin bordered with lace, a heavy chain, and a girdle weighing a thousand gold pieces, studded with turquoises. The captain of the guard, sitting at the door of the robing-room, presented him according to custom with a piece of gold, a turban, and two immense turquoises set in a ring." When, two days later, he took his seat in office, a fine cloth of brocade set with turquoises was set before him.

It is worth making these quotations because the author tells us that "it was on the model of Mahmud and his successors that the later courts of Lahore, Agra, and Delhi were formed." It was in the days of Sultan Ala-ud-din, of Delhi, that his generals (1310) first spoiled the Deccan, whence they took "coffers of precious stones and pearls," and, as it is estimated, 1,200 tons of gold. This wealth, which should have been spent in developing the country, was the cause of its decay. Sir Thomas Roe's account of the weighing of the Great Moghul is quoted in full. Even the golden scales were jewelled. The Emperor "at last appeared clothed, or rather laden, with diamonds, rubies, pearles, and other precious dainties, so great, so glorious; his sword, target, throne to rest on, correspondent; his head, necke, breast, armes, above the elbows, at the wrists, his fingers, every one with at least two or three rings; fettered with chains, or dyalled diamonds; rubies as great as walnuts, some greater; and pearles such as mine eyes were amazed at." He was weighed six times against silver, "gold with jewels, and precious stones, but I saw none, it being in bagges, might be Pibles," cloth of gold, &c.

Labarte, in his "Handbook of the Arts of the Middle Ages and Renaissance," mentions a curious work of the goldsmith, J. M. Dinglinger (1665-1731), which still exists in the famous Green Vaults of Dresden. "It is the representation, in little detached figures of about 2 to 2½ inches high, of the Court of Aurangzeb at Delhi. The Great Moghul is seated upon a magnificent throne, surrounded by his great officers of state. Princes, his vassals, are kneeling upon the steps of his throne and presenting him with rich offerings which the officers of the household are eagerly receiving. In the foreground are courtiers and ambassadors from Asiatic princes, attended by a pompous train, to pay their court to the monarch, bringing with them valuable presents, among which may be noticed elephants with trappings prepared for war, horses richly caparisoned, camels, and dogs. All these numerous little figures, chased in gold and enamelled in colours, have been made separately, and the greater number are removable at pleasure. They are distributed over a plateau of silver, upon which the artist has represented three courts of the palace of Aurangzeb. The court in the background covered with a carpet of cloth of gold, is surrounded with porticoes and small buildings, in the midst of which is the rich tent that covers the throne of Aurangzeb. Dinglinger executed this work from drawings brought from India, and from the narratives of travellers who had visited the court of that prince; nothing, therefore, could be more correct than the costume. The Asiatic ceremonial and etiquette are also strictly attended to. Dinglinger's little figures are chased with extraordinary perfection, they have life movement and a highly characteristic expression. He was occupied, it is said, eight years at this work, assisted by his sons and his two brothers. The Elector of Saxony paid him 58,484 crowns of Saxony for this piece. Dinglinger was completely enslaved by the vitiated taste of his period; it is grievous that an artist of his merit should not rather have employed so much time and money in producing something which might at the present day be ranked amongst works of art."

I have quoted Labarte at length because his account of Dinglinger's masterpiece illustrates exactly the nature of the work which an Indian goldsmith and jeweller was not unfrequently, and is even still, called upon to perform. Moreover, it is worth noting the curiosity and interest which the minute accounts of Oriental wealth and display excited in Europe two or three centuries ago. An example of this German work is given in Plate 140, 1000, from the Waddesdon room of the British Museum. It is a statuette of an Oriental prince in gold, enamelled, and set with jewellery by a German artist of the seventeenth century.

Students of art metal ware, must necessarily devote much attention to the Bronze Age, in which many processes and designs, that are still in use, were even then known. Amongst the former we have the cire-perdue process, which, for instance, was adopted with great success in Scandinavia for bowls, ceremonial axes, and other elaborate productions. A full account of this interesting and ingenious art work, as still practised in India, was given in No. 97, pages 35 to 37. According to one authority, this age began at 1200 B.C., and, to another, was well developed from the fifteenth or sixteenth century B.C. to the seventh. In the introduction to the British Museum Guide, however, the significant observation is made that no two prehistoric periods can be separated by a hard and fast line. The terms, Stone, Bronze, or Iron Age, do not denote divisions of time, but stages of human culture which gradually supersede each other and are not uniform in all parts of the world. The dates which are stated in this section are therefore far from conclusive.

It is unnecessary and impossible to consider here the distribution of ornaments in all parts of the world and at all periods in prehistoric times, but only to note a few salient points which bear on the subject. In the British Museum Guide to the Bronze Age (Charles H. Read) there is an interesting section on India, which begins with the following words: "The great southern peninsula has been regarded by more than one archæologist as the first home of the bronze industry, but reasons have already been given to show that the theory is as yet unsupported by sufficient evidence."

In 1870, at Gungaria, in Central India, flat celts and "a number of silver ornaments—some circular, others cut into the outline of the heads of oxen—were found together. . . ." Doubts have been cast, however, on the extreme antiquity of the Gungaria find, partly because the silver ornaments are not very primitive in appearance, and partly because the existence of two distinct forms among the celts suggests previous stages of development. The writer advances evidence, however, to the contrary, such as silver having been met with at a very early period in Spain and the Mediterranean. Moulds of stone, clay, and even bronze were in use in Britain. Decorated armlets, having engraved patterns, were found, also a collar with spiral coils of bronze, generally known as ring-money; the former are often seen in peasant ornaments in India, but not the latter. Some of the armlets of the Hallstatt period, which belongs rather to the Iron Age, perhaps from 750-550 B.C., were very massive, as is the case amongst the Bhils and similar tribes in India. Numerous examples of the torque or twisted collar, from the Bronze period, are illustrated side by side with those now in use in India, because of their strong resemblance, especially in the different modes of termination by link or knob, or even the heads of animals. Most of them came from the Marne cemeteries in France, and date from perhaps 350-200 B.C.

Much jewellery, in the form of earrings, pins, bangles, &c., of the precious metals, was found in the second to the fifth settlements at Hissarlik or Troy (about 2500-1500 B.C.).

Turning to Egypt, it is said that copper was the first metal employed and was the only metal at the close of the predynastic period or before about 4300 B.C. For the fourth dynasty (about 3766-3006 B.C.) bronze came into use, and may have been introduced from Babylonia, where copper implements probably go back beyond 4000 B.C. The author of the Guide has important references to trade communications and the transfusion of ideas even in the prehistoric periods. Thus he observes that "it may here be repeated that Spain formed a link in the chain of countries connecting the Mediterranean and the North-Western Neolithic times, while its wealth in silver and other metals must have early proved an attraction to the peoples of the Mediterranean even before the time of the Phœnicians." Again, "the quantity of jade implements discovered in the Swiss lakes is held by some to prove that even in the Stone Age communications" (with Central Europe) "must have existed with the East." These references show the great probability of the existence of more free communications between different parts of the Ancient World than is generally supposed.

Mr. J. Romilly Allen, in his work on Celtic Art in Pagan and Christian times, remarks that "Long before direct contact took place between the Northern Barbarians and the Egyptians, Assyrians, Phœnicians, Greeks, Romans, and other great nations of antiquity, through invasions or immigrations, a more indirect contact must have existed for centuries, owing to the trade in such things as amber, gold, bronze, and tin." Mr. Allen has other interesting observations which are germane to our subject. For example, he figures a bronze beaded torque from Dumfriesshire in Scotland, of the late Celtic period, in which the beads are alternately convex and concave of Indian shapes, and he refers to the frequent termination of torques in serpents' heads.

The following note, of technical processes employed during the early Iron Age in Britain, is of interest. He notes, "that the Celts became expert workers in metal before the close of the Bronze Age." They could make beautiful hollow castings, beat out bronze into thin plates, and rivet them firmly together, and could ornament shields and golden diadems with repoussé patterns consisting of corrugations and rows of raised bosses, and were not unacquainted with the art of engraving. The Celt of the Iron Age was still more proficient. Casting was applied to many more objects than before, and beautifying surfaces by chasing, engraving, and enamelling was understood. He worked also in repoussé, hammering up from the back. Brazing and soldering appear to have been unknown. Mr. Allen states that the evidence of both history and archæology tends to show that the art of enamelling on metal was, in the first instance, a British one. It is not clear, however, whether he includes Asia in these observations.

All the enamels of the late Celtic period belong to the champlevé kind. The colours used are bright red, yellow, and blue. In this connection the numerous illustrations of Indian enamel may be compared with those in the present number of Roman and British origin.

Mr. Allen, who also quotes Dr. A. Evans, refers to gold and silver chains made of fine wire, such as those which are attached to the Chorley fibula and the Tara brooch, which, according to Dr. Evans, were in use among the Celtic people during the first two centuries before and after our era. He says the art of making these chains was no doubt of foreign origin, as they have been found in Etruscan tombs of the fifth century B.C. in Italy.

In the early Iron Age bracelets were cast in one piece and made in imitation of a string of beads, this style being of foreign origin. Such work is still done in Indian bazaars. The swastika was probably a foreign importation. Mr. Allen believes that the Algerians and Irish got the penannular brooch from the same source, namely, the East, and that its introduction into the British islands took place when the traffic in silver bullion from the East commenced, perhaps about 880-955 A.D., as many thousand Mohamedan silver coins, with rings, ornaments, and ingots of that metal of that period have been discovered in Scandinavia and Great Britain. He figures the chain and other parts of the Tara brooch, which is decorated with many kinds of ornaments, as gold filigree, niello, enamel, and settings of amber and glass. The section in his chapter on Celtic art in the Christian period is particularly interesting to us. The metals in use were gold, silver, copper, lead, bronze, brass, and other alloys. They were cast and wrought, and ornamented by means of enamelling, niello, plating, gilding, repoussé work, chasing, engraving, piercing, inlaying, filigree work, Trichinopoly chain work, and settings of precious stones, amber, and glass. The different pieces were fixed together by rivets, and, if known, soldering and brazing were not employed to any great extent. The Ardagh challice and the Tara brooch illustrate nearly all the materials and technical processes and methods of construction used at this period.

He says "Niello probably found its way to Ireland from the East. It was used by the Byzantines as early as the beginning of the ninth century." It is much practised at the present time in Burmah, Kashmir, &c., in India. The filigree work is often covered with minute granulations. The Trichinopoly chain work of silver wire, as used in the Tara brooch, &c., can be traced back in Europe to the Pagan Celtic period.

Lastly, the following extract from Mr. Allen's work seems applicable in an extraordinary degree to Indian conditions. He says: "The great difficulty in understanding the evolution of Celtic art lies in the fact that, although the Celts never seem to have invented any new ideas, they professed an extraordinary aptitude for picking up ideas from the different peoples with whom war or commerce brought them into contact. And once the Celt had borrowed an idea from his neighbour, he was able to give it such a strong Celtic tinge that it soon became something so different from what it was originally as to be almost unrecognisable."

This tendency, he adds, of copying, other than inventing, is brought out most clearly in their coinage. Without reflecting in any way on the original powers of the Indian, it will perhaps be admitted that, like the Celt, he has singular powers of adapting to his own use the artistic ideas of foreigners.

The following extract from Mr. Douglas Sladen's work on "The Secrets of the Vatican, 1907," shows how Etruscan influences and the actual processes have continued down to the present day, and how like some of their jewellery was to that of the Hindus. He writes that "there is one point at which the Etruscans fire the most common-place imagination—their working in gold. There is no jewellery so beautiful—apart from the effects produced by costly gems, like diamonds, emeralds, rubies, and pearls—as the typical Roman jewellery, which is a direct imitation of the Etruscan. The stones it employs are usually opaque stones of moderate value, like *lapis lazuli*, malachite, and coral; it relies for its effect on fine, bright gold with Etruscan chasing, and encrusted ornamentation of roses, and so on, each one separately and delicately soldered on, or it sometimes abandons stones altogether and reproduces, with exquisite art, natural objects, like ram's heads, crawling snails, or oak leaves and acorns."

The golden objects in the centre case of the Gregorian Museum, like many of the finest bronzes in the room, came from the Regulus-Gal'azzi tomb at Cerveteri, which Dennis, in his "Cities and Cemeteries of Etruria," calls the remarkable Pelasgic tomb at Cerveteri. The most striking object in the case is a large gold breast plate embossed with twelve bands of figures—sphinxes, goats, flying horses, panthers, deer, and winged demons; it suggests the sacred plate of Aaron, the High Priest, described in the Bible, which was to be fair square, measuring a span each way. It is an exquisite piece of antique work in beaten gold.

Its low reliefs belong to the earlier Pelasgic or Tyrrhene style of Etruscan jewellery, which Signor Castellani would not allow to be Etruscan, because it was also found at Palestrina. Cumœ, and elsewhere in Italy, and in Egypt, Assyria, Phœnicia, and the Crimea. Dennis, in his immortal book on Etruria, says: "The materials employed in this Tyrrhene style are gold, silver, bronze, amber, ivory, and variegated glass.

The style is easily recognized by its elegant form, the harmony of its parts, and the purity of its design, but chiefly by the marvellous fineness and elaboration of its workmanship. The patterns, which are always simple yet most elegant and admirably harmonious, are wrought by soldering together globules or particles of gold so minute as hardly to be perceptible to the naked eye, and by the interweaving of extremely delicate threads of gold, and are sometimes, but sparingly, interspersed with enamels. . . . On a close inspection, this jewellery astonishes and confounds by its wonderful elaboration; at a little distance it charms the eye by its exquisite look, and the graceful character and harmony of its outlines. In fact, it is the perfection of jewellery, far transcending all that the most expert artistes of subsequent ages have been able to produce."

"To this style belongs the most beautiful jewellery discovered in Etruria, and elsewhere in Italy, as the gold ornaments from the Regulus-Gal'azzi tomb, now in the Museo Gregoriano, and those, still more beautiful, recently found at Palestrina, and now exhibited at the Kürcherian Museum at Rome."

Signor Castellani points out that "the Hindu jewellery, even of the present day, bears no slight resemblance to this ancient style. Though inferior in execution, and betraying a decline of taste, the method of soldering minute grains of fine threads of gold, mixed with enamels, to other objects, is precisely that employed by the Tyrrhenes of old." "The genuine Etruscan jewellery," says Signor Castellani, "is very inferior both in taste and execution to that of the Tyrrhene style, of which it is a corruption."

"Etruscan jewellery is of two descriptions, domestic and sepulchral—the former most substantial and durable, the latter very light and flimsy, witness the wreaths of gold leaves found encircling the helmets of illustrious warriors. The amber, coloured glass, enamel, and ivory, used in the preceding style are rare in this, and give place to gems—chiefly garnets, onyx, and carnelian. Among the ornaments for personal use are earrings of various forms and dimensions, large fibula and brooches, massive gold rings, lentoid or vase shaped, bull or agate scarabæi; but in all these productions an inflated and artificial style, marking the decline of the art, is conspicuous."

He mentions a curious fact, that the manufacture of this jewellery has never ceased to go on in a little town of the Umbrian Marshes, called S. Angelo in Vado. Its manufacture in Rome probably had not begun in Dennis's day, but now it is one of the chief minor industries of Rome.

It is impossible to discuss adequately in this article the influence of the East on the West, or of the West on the East, in the Christian era and especially in recent times. The illustrations and the descriptions at the end of the number will assist those who desire to pursue the enquiry, and there are numerous works on the subject ending with the very full and interesting account of European Jewellery of Mr. H. Clifford Smith, which was published in 1908. He remarks that: "As the inventors of methods and the creators of models which exercised a widespread influence in the development of subsequent types of ornaments, Egypt, and in a lesser degree Assyria also, occupy a position of considerable importance. The chief agents in the spreading of these methods and models were the Phœnicians," who traded to Italy and Greece. They copied the nations with whom they came in contact, and produced a native jewellery of composite type. As they imitated Egypt and Assyria, later on they began to imitate Greece. The Greeks made use of the composite style but subsequently shook it off, incorporating it only after many modifications into their own developed art. He cites the amphora—which can be traced to Assyria—as having been so reformed by the Phœnicians, and transmitted to Greece. From Egypt the Phœnicians acquired great technical skill, which finish was transmitted to the finest Greek jewellery, and to the personal ornaments of the early Etruscans. The art of soldering was greatly perfected and developed by the Phœnicians, and it is generally believed that they invented the process of granulation, which the Etruscans perfected. The best Phœnician jewellery has been found in Cyprus. They were skilled in manufacturing glass and had necklaces of glass beads and gold.

Byzantine jewellery, from the peculiar position of the capital of the Empire at Constantinople and the vast influence which radiated from it, is of special interest. Of it, Mr. Smith writes as follows:

"The peculiar interest of Byzantine jewellery lies not only in its own composite nature, but in the great influence it exercised on European ornaments during the greater part of the middle ages. Byzantine jewellery is the result of a compromise between Oriental and Western influence"

In this connection he writes of the skill in patient and exuberant decoration in which the Oriental workman excels. He remarks that the quantities of pearls and precious stones that passed through Constantinople—the highway of commerce between Europe and the East—soon rendered the workmen of the Empire susceptible to the magnificence of Oriental decoration. "Owing to the irruption of Oriental ideas in the sixth century, consequent on the sack of Antioch by the Persians and the conquests of Belisarius, splendour of material began to supersede the refinement of classical lines. This tendency is admirably

displayed on the rich mosaics of the period, especially those in the church of San Vitale, at Ravenna, in Italy, which represent the Emperor Justinian and his wife, Theodora. The Empress and her attendants are clothed in robes stiffened with gold and set with precious stones; pearls, rubies, and emeralds encircle her neck and shoulders, and, entirely covering her head, hang down from the temples in rich festoons upon the breast." The iconoclastic movement of the eighth century was of great importance because many goldsmiths were driven out by the decrees of Leo III., and spread the processes and designs of Byzantine art to Italy, Germany, and Gaul. The active overland trade with India, which had been kept up for many years with no small influence on the ornaments of the West, was augmented, while the commercial relations with Persia were maintained.

Enamel and coloured stone now formed the chief artistic aspect of jewellery. Cloisonné enamel was preferred to cloisonné inlay or incrustation of glass or garnet in cells. Gems were often worn as in Roman times, mounted in brooches in a beaded or open-work setting. Crescent-shaped earrings prevailed from the sixth century onwards.

The sack of Constantinople by the French and Venetians dealt the death-blow to Byzantine art, which, however, continued to exercise a potent influence up to the thirteenth century, and even up to the present day in Russia.

In regard to the barbaric jewellery of Europe, Mr. Clifford Smith writes: "Just as the desire to imitate precious stones led to the introduction of enamel, so the Gothic nations, who hailed from the South-East corner of Europe, brought into jewellery the Oriental love for colour. Coloured stones, usually garnets, or red glass cut in slices, were inlaid on a metal surface, or even placed side by side, separated only by intervening strips of metal. This process of inlay, or incrustation, is of great importance, since almost every species of jewellery in Europe, from the third till about the eighth century, is thus decorated. The decoration of this jewellery is clearly the result of influences connected in some way with the East." His further observations on this subject demand careful study, especially in regard to the value of the Oxus Treasure in the chain of evidence connecting the East with the West.

He refers to the possible Oriental influences, the friendship of Charlemagne with Harun-al-Raschid, the sovereignty of the Arabs in Spain and Sicily, the Crusades, and the importation of treasure by the merchants of the Italian Republics, but adds that "by the beginning of the twelfth century the West seems to have become lastingly independent of the East, even with regard to its ornaments."

It is hardly necessary to pursue the subject except perhaps to quote Mr. Runciman, M.P., the President of the Board of Education, who, as recently as May 6th last, told the influential deputation headed by Lord Curzon, which he received on the subject of the future treatment of the Indian Collection at the Old South Kensington Museum, that he did not consider that "Indian Art can or ought to be considered a thing apart by itself." He went on to speak thus: "The highest authorities in Indian Art inform me now that there is a growing feeling that Indian Art and the Renaissance in Europe are closely related and interrelated." These observations certainly point to the desirability of illustrating in a Journal of Indian Art examples of both European and Indian jewellery, but readers must judge for themselves how far they confirm or not the important statement of the President of the Board of Education.

In conclusion, I quote the following aphorisms at the heads of chapters of the work of Charles Blanc on "Art in Ornament and Dress" (Translation 1877), as I believe that if the present articles are carefully studied, and especially the illustrations, it will be found that Indian jewellers have nearly always strikingly conformed to them.

16. "Of all the arts which are treated of in this book, the jewellers' and goldsmiths' are the most valuable."

17. "Order being an essential element in the composition of a jewel, the methods which should chiefly be used are repetition, alternation, symmetry, radiation, progression, and consonance."

18. "The decline of symbolism has caused the disappearance of a part of the charm of jewellery by giving increasing importance to the imitation of real objects."

19. "The representation of the human body sculptured in relief, however slight it may be, is unsuitable in a jewel which is to be worn."

20. "Of all the resources at the jeweller's command, enamelling requires the most artistic treatment. The theory of colours is a great assistance to jewellers in all that concerns transparent enamels—in their application on gold, silver, and platina—and in mounting precious stones with enamels."

21. "In their relations to sentiment and beauty, jewels are subject to æsthetic and moral proprieties. Far from being a frivolous subject, dress and ornaments are for the philosopher an indication of morals and a sign of the reigning ideas of a period."

DESCRIPTION OF THE ILLUSTRATIONS IN PART XIII.

Plate 149.—The Indian Orders of Knighthood and Decorations reproduced by permission of the Secretary of State for India, under facilities kindly obtained by the Central Chancery of the Orders of Knighthood. 1059: Insignia of the Star of India. 1060: The Imperial Assemblage Medal of 1877. 1061: The Delhi Coronation Durbar Medal of 1903.

Plate 150.—The Indian Orders of Knighthood and Decorations (continued). 1062: Insignia of the Order of the Indian Empire. 1063: The Indian Volunteer Officers' Decoration. 1064: The Kaisar-i-Hind Decoration. The following information regarding 1060, 1061, and 1062 has been furnished from the office of the Secretary of State for India.

Note.—1. *The Imperial Assemblage Medal of 1877.*—On the occasion of the proclamation of the assumption by Her late Majesty, Queen Victoria, of the title of Empress of India on the 1st of January, 1877, at Delhi, the Governor-General was authorized to confer gold and silver Commemorative Medals. The gold medals were presented to high officers of Government and certain Ruling Chiefs and Nobles. 2. *The Delhi Coronation Durbar Medal of 1903.*—On the occasion of the celebrations held at Delhi in December, 1902, and January, 1903, in honour of the Coronation of His Majesty the King, Emperor of India, special gold and silver Commemorative Medals were struck. The gold medals were presented to Ruling Chiefs and a few high officers of Government. 3. *The Indian Volunteer Officers' Decoration.*—"*The Volunteer Decoration*" was instituted for the United Kingdom by a Royal Warrant dated 25th July, 1892. It was extended to India and the Colonies by a Royal Warrant dated 24th May, 1894. These Royal Warrants are reprinted in the War Office Quarterly Army List. (From particulars received from the India Office.) 4. *Insignia of the Star of India.*—The Badge is an onyx carved of Her Majesty Queen Victoria's effigy set in a perforated and ornamented oval containing the motto of the Order, "Heaven's Light our Guide," surmounted by a star in diamonds. The ribbon of the Order is sky blue having a narrow white stripe towards either edge, and is worn from the right shoulder to the left side. The collar is composed of the lotus of India, of palm branches, tied together in saltire, and of the united red and white rose. In the centre is an Imperial Crown, all richly enamelled on gold, in their proper colours. The Star is composed of rings of gold issuing from the centre, having thereon a star in diamonds and ring upon a light blue enamelled circular ribbon, tied at the ends, inscribed with the motto of the Order, viz., "Heaven's Light our Guide," also in diamonds. (Taken from "Lodge's" and other "Peerages.") 5. *Insignia of the Order of the Indian Empire.*—The Badge: An enamelled rose, having Her Majesty's royal effigy in the centre. The star also having the royal effigy in the centre, and the motto of the Order in a circle "Imperatricis Auspiciis." The collar composed of elephants, lotus flowers, peacocks in their pride, and Indian roses linked together with chains of gold. (Condensed from the "Peerages.") 6. *The Kaisar-i-Hind Medal.*—There are two classes: the first in gold, the second in silver. The badge or decoration has Her Majesty's (the late Queen Victoria's) royal cypher in the middle.

Plate 151.—1065: Mosaic portraits of Justinian I., Emperor of the Eastern Empire from 527 to 565, and of his wife Theodora, are the glory of the church of San Vitale, at Ravenna, Italy. Under the former the famous Code was compiled and promulgated in April, 529. To this code Justinian added the Digest or Pandects, the Institute and Novels, promulgated 15th November, 534. These compilations have since been called, collectively, the body of the Civil Law *(Corpus Juris Civilis).*

The Church of San Vitale, which was consecrated in 547, is a magnificent basilica which was built in the reign of Justinian, in imitation of San Sophia in Constantinople. In the interior mosaics abound. The choir is gorgeous and of great historical interest, seeing that its mosaics represent the Court of Justinian and his wife the Empress Theodora and those notorious personages themselves. The central figures of the latter with her ladies presenting gifts to the church are reproduced because they are shown wearing gorgeous jewellery.

The following account is translated from the work on Ravenna, by Corrado Ricci (Bergamo, 1902).—"The Emperor Justinian, wearing the royal robes and the crown, is offering gold in a large vessel, for the construction of the temple. On his right hand is Julian Argentario, and behind him another minister and the soldiers. At his left hand stand Massimiano, in episcopal robes, with the cross in his hand, and two priests with the book and the censer, in the act of consecrating the church.

The Empress Theodora and her women look on from the opposite wall. It is indeed she, in this ancient temple—she, the celebrated woman who from the histrionic life of the circus was raised to the throne of the Orient; who, throwing away the false gauds of the actress, put on the precious Byzantine crown, starred with gems; who, from the comedy that amused the populace, passed to the tragedy which stained her with

blood; who, from the criminal bed, open to all who paid, leaped to the glory of the sacred throne. Her tall, slender figure, her eyes, full and round, give her just that nervous, hysterical, and brazen appearance which seem to fit in with her history and with her great success in a highly-civilized and corrupt society.

In these mosaics notable feeling and execution are apparent. The heads bear typical features which make one believe in the genuineness of the likeness. The embroidered garments, the ornaments, the head-dress, and the jewels, are studied with special care, as though with the intention of giving to the Western world a clear idea of the splendours of the Byzantine court. Its historical importance is, however, the greater, because in these two pictures of Justinian and Theodora are preserved also the customs of that grand period of Byzantium which has inspired so many works of art even in modern times."

Plate 152.—1066: Portrait of Fateh Ali Shah, king of Persia (1797-1834). Painted by Mirza Baka, a Persian artist. From the India Office. The long black beard of Fateh Ali Shah is well known, as for a long period he is represented wearing it in all kinds of art work, such as lacquer in paintings and in ornaments.

Plate 153.—1067: Portrait of Nadir Shah, ruler of Persia, otherwise Tahmāsp Kuli Khan, an Afshārhid Turk (1736-1747), who sacked Delhi in March, 1739, in the reign of the Emperor Mohamad Shah. From a portrait by an European artist which is now in the India Office. Reproduced by permission of the Secretary of State for India. The ornaments worn by the Shah were probably taken at the sack of Delhi.

Plate 154.—1068: Portrait by a Persian artist of Nadir Shah of Persia. From the collection of the late Earl Egerton of Tatton.

Plate 155.—1069: Painting in tempera colours. From the India Office. Reproduced by permission of the Secretary of State for India. It represents a Durbar before 1822, in the Diwan-i-khas or Hall of private audience in the palace at Delhi. The personages present are not all the same as in Plate 156, which follows; as, for example, in the present case they include Sir David Ochterlony, a famous Agent to the Governor-General at the Moghul Court.

I have been favoured with the following account of the different personages, whose names are written on their garments, by Mr. T. W. Arnold, formerly Assistant Librarian at the India Office, and now the recently-appointed educational adviser to Indian students.

1. Akbar Shah II.
2. Mīrzā Salīm Bahādur (said to have been the Emperor's favourite son. Hayāt-i-Javīd, page 19).
3. Mirzā Abu'l-Muzaffar (afterwards the Emperor Bahadur Shah).
5. General Ochterlony.
6. Khwājah Murīd Khān.
7. Nawāb Muhammad Mīr Khān.
8. Mustaufī Allāh Yār Khān (examiner of accounts).
23. Ghulām Majīd Uddīn.
20. Nawāb Mughal Beg.
19. Bakhshī Mahmūd Khān (the treasurer of the palace, mentioned by Bishop Heber—"Narrative of a Journey through the Upper Provinces of India." Vol. I., page 565. London, 1828).
17. Qalandar Beg.
15. Sheo Lāl.
13. Shādī Rām.
11. Tafazzul Husain Khān.
10. Yāqūb 'Alī Khān.
9. Karāmat 'Alī (a distinguished scholar and mathematician. Āsār, page 126. Delhi, 1847).
24. Mīrzā Jahangīr Bahādur (Akbar Shah II.'s eldest son, died 1821).
25. Mīrzā Bābar Sāhib.
26. Mīrzā Husain Bahādur.
27. Mīrza Kai Qubād.
28. Nawāb Nazir Manzūr 'Alī Khān.
29. Iqbāl 'Alī Khān.
38. Mīr Nisār 'Alī (tutor to the Emperor's children. Āsār, page 131.)
35. Ghulām Sarabdar Khān.
34. Nawāzish 'Alī Khān (a scholar, learned in the traditions. Āsār, page 131).
33. Rukn ud-Daulah.
32. Raja Jai Singh Ra'īs.
42. Najaf 'Alī Bāqir.
41. Raja Kidār Nāth.
31. Mīr Jahd Khān.
29. Iqbāl 'Ali Khān.
30. Hisām al-Dīn Junaid Khān.
45. Nabī Bakhsh Khān.

Plate 156.—1070: Painting in tempera colours. Court reception by the Emperor of Delhi, Mohamad Akbar Shah II. (1806-37). I.M. 3535. A large number of persons are depicted wearing jewellery, such as used in Oudh and North-West India. This seems to be an earlier representation of a Durbar in Akbar Shah's reign than Plate 155.—1069. Some of the personages are shown in both pictures.

Plate 157.—1071 to 1075: Gold Ornaments from tomb 93 Enkomi (Salamis), Cyprus. B.M., Gold Room, window cases. 1076: Necklace from Enkomi; Carnelians and gold. 1077: Diadem ornamented

with filigree. Found in 1865 at Santa Eufemia, Calabria; fourth century B.C., finest Greek period. B.M., Gold Room, case D.

According to Appendix II. to the guide to the Greek and Roman Antiquities of the British Museum, the treasure (gems, gold ornaments, &c.) from the Greek Islands, Enkomi, Ialysos, dates before 700 B.C.; the finest gold ornaments (Greek) from about the Peloponnesian War (431-404 B.C.) to before 200 B.C.; Græco-Roman gems about the first century A.D., and the later Roman gems about the second century A.D. Wall cases A to H are referred to in the lists:

Case A contains some objects attributed to the sixth century B.C.

Case B: Archaic Greek type.

Case C: Archaic and Early Etruscan, in which the process of employing minute globules of gold to form patterns or otherwise to enrich the design is carried out to a very great extent. "In many instances these globules are almost as fine as gold dust." Date, seventh to sixth century A.D.

Case D: Greek gold ornaments of the finest period, about 420-280 B.C. "The figures are for the most part made by pressing thin gold plates into stone moulds." "Instead of the Etruscan globules, fine threads of gold (filigree) are here employed with extremely delicate effect." The process of enamelling frequently occurs, but their enamel is always in very small quantities, as may be seen in the beautiful necklace from Melos. "For examples of filigree see the fine series of earrings, pendants, and necklaces from Kymè, in Æolis." A diadem from Calabria (South Italy) was found with bronze coins issued 287-278 B.C.

Cases E and F: Later Etruscan ornaments, as large necklaces with pendent balls, or earrings of unusual size.

Case G: Gold ornaments of the later Greek period (third to second century B.C.). Filigree and enamel. Some of the ornaments are terra cotta gilt made for funeral purposes, but "the articles are as fine as those of gold in an artistic sense." They have in fact been made from the same moulds as the gold ornaments.

Case H: Ornaments of the Roman period. "The work is less minute, the designs become more commonplace, and there is a strong tendency towards the use of precious stones and pearls.

Plate 158.—1078: Pendant from a diadem, one of a pair. A gold disc representing Thetis riding on a seahorse carrying the greaves of Achilles surrounded by a border of foliage in applied filigree. The lower half of the rim is ornamented with raised flowerets and studs, and from it depend twelve plaited chains traversing one another, with flowerets at the point of junction and five rows of pear-shaped pendants of three different designs. Reproduced by Senor Alessandro Castellani, after the Greek original found in the larger of the two tunnels called the Blitznitse, in the island of Thaman, territory of Phanagoria, Southern Russia, and now in the Museum of the Hermitage, St. Petersburg. 632A, V. and A. Museum. 1079: Necklace of pendent pomegranates ornamented with filigree. Cyme, or Kymè, in Æolis. Case B, Gold Room, B.M. Finest Greek period. B.M., Gold Room, case D. The chains and ornaments are common in India. 1080: Necklace of four plaited cords, with crescentic pendant. Ancient Egyptian jewellery (case of Roman jewellery), Egypt. Frank's bequest. B.M., Corridor, Gold Room. The flat band of chains is common in India. 1081: Magnificent gold necklace of various gold and jewelled ornaments pendent by a network of chains from a band of chains. B.M., Early Etruscan, case C, Gold Room.

Plate 159.—1082: Earring. Gold open filigree work, with circular tops. The pendants spherical, with seven small balls round the side and one at the bottom of each. I.M., 616-540. Bought £4 10s. Indian (Cuttack?). 1083: Necklace of beads. Gold, granulated, plain and filigree. B.M., Gold Room, case C. Finest Greek period. 1084: Necklace of glass and gold beads. From Vulci. B.M., case C, Gold Room. Late Greek period. A similar necklace with a pendant is close by; it came from the Castellani collection. 1085: Part of necklace of gold beads, Roman. B.M., Gold Room, case G. 1086: Part of Bracelet. Eight oblong plaques of gold and connected by rings, ornamented with filigree and round bosses. Delhi. L. $7\frac{1}{2}$ in. by W. $1\frac{11}{16}$ in. Rs. 15 15 0. 40-1881. 1087: Ancient Egyptian jewellery. Necklace, gold, with leaf pendants, each of which has a pearl in an opening in the leaf; garnets with blue glass and semi-vitreous pottery beads, and a similar oja or eye symbol pendant. B.M., Gold Room, Corridor. 1088: Pair of earrings of gold, set and hung with sweet water pearls. Mark C.S. Made by the late Signor Giuliano. L. $2\frac{11}{16}$ in., W. $\frac{3}{4}$ in. Given by Messrs. C. and A. Giuliano. 170-170A, 1900. V. and A. Museum. 1089: Earrings, a pair. A gold rosette, arranged with granulated petals, arranged round a coral centre holding a coral pendant capped with a gold loop, ornamented with granulated beading and foliage, and terminating in a granulated calyx. Made by Castellani. L. $3\frac{3}{16}$ in. B.I. (Castellani Collection). £10 the pair. 633A, 1884, V. and A. Museum.

Plate 160.—1090: Bronze Brooch in the form of the swastika. Brough, Westmoreland. B.M., Central Saloon. 1091: Silver Brooch and Chain, found near Chorley, Lancashire, with coins from Galba to Hadrian, A.D. 68. B.M., Central Saloon. 1093: A similar brooch to No. 1091. 1092: Enamel Brooch with movable dolphin in the centre (Frank's "Glass and Enamel," page 14). Hastings' collection. Purchased 1897. "The finest specimen (Roman enamel jewels executed in Britain), discovered in London, was formerly in the collection of Lord Hastings, from which it was acquired by the British Museum. It is a circular flat plaque, the pattern on which consists of four quatrefoils with blue centres on a red ground, and four small circles of yellow enamel between them. In the centre is the revolving figure of a dolphin." (Jewellery by H. Clifford Smith, M.A., 1908, Plate 11. fig. 7.) 1094: Bracelet, gold, surrounded by a frieze of applied figures representing an Assyrian monarch returning from the hunt, and offering libations; at his feet lie dead lions, whilst attendants are bringing another towards the altar. Around the top of the frieze runs an arched ornament, and along the bottom a line of rosettes. In the centre of the fastening is a Babylonian cylinder. Stamped J.B., made by John Brogden, of 16, Henrietta Street, Covent Garden. English, nineteenth century. Bolcklow bequest. B., V. and A. Museum. 1095: 138, 16529, Gold Pendant in the form of a king seated on a throne. The face was probably inlaid with *lapis lazuli*, and the rich feather-work tunic, the collar and necklace, &c., with red, blue, and green paste. The ornament of the plinth of the throne, formed by sceptres and symbols of life, was filled with coloured paste. The reverse of the pendant is carefully chased with delicate feather work, the symbol of the union of the two countries, &c. Nineteenth Dynasty or a little later. (Case B.C. 3600 to B.C. 300) 1096: 14595. One of a Pair of Gold Bracelets, inlaid with *lapis lazuli* and blue paste. The centre scene represents Harpocrates sitting on a lotus flower between two urœi wearing discs. Inside is inscribed in hieroglyphics a short text, which says that these bracelets were "made for the princess, the daughter of the chief of all the bowmen Nemareth, whose mother was the daughter of the prince of the land of Reshnes." Nemareth was the descendant in the fifth generation of Buiu-uaua, a Libyan prince, and the father of Shashang I. (Shishak of 1 Kings, xiv. 25), King of Egypt about B.C. 966. B.M., case J., Egyptian Room, 14595. 1097 to 1103: Enamelled Bronze Brooches and Studs, from Pont-y-Saison, near Chepstow, Monmouth, 1861. Purchased 1891. B.M., Central Saloon. Plate 11, fig. 6: "Quite different (from 1092) are certain ornaments set with slices cut from rods of millefiori glass, which were executed for the most part during the decline of the Roman power. One of the most elaborate is a brooch found at Pont-y-Saison, near Chepstow, Monmouthshire, in 1861, and preserved among other Roman-British antiquities in the British Museum. (W. Clifford Smith). 1104: Girdle Clasps. Silver, circle, repoussé. Greek. Diameter 2¼ in. Bought (Annual International Exhibition, 1872), 10s. 1475, 1475A.—'73. 1105: Gold Buckle, set with garnets and glass (and two pairs of clasps not reproduced). Found at Taplow, Bucks. Anglo-Saxon. B.M., Anglo-Saxon Room.

"One of the finest examples of Anglo-Saxon jewellery is the magnificent gold buckle discovered in a grave near Taplow, Bucks, and now in the British Museum. The base of the tongue and the oval ring are inlaid with glass paste upon gold foil; while the buckle-plate, enriched with three garnets, is covered with many graduated rows of finely twisted wire, and has its centre filled with a sort of vermiculated pattern upon repoussé ground." (Plate 12, fig. 6, H. Clifford Smith, M.A.)

Plate 161.—1106 to 1118 (except 1111 to 1115): Base Metal Ornaments, to illustrate modes in different countries of ending bangles or torques. 1106: End of penannular Torque or Necklace. Modern Indian, Mysore. I.M. 8577. 1107: Ends of Anklet, Mysore. I.M. 860. 1108: Ends of an engraved Torque or Anklet, Mysore. I.M. 1095. The above three ends of ornaments are common in India. 1109: Gold Bracelet, corded pattern with fluted caps on the extremities. Found in the Crimea. Ancient. $\frac{3}{16}$ in. thick, diameter 2½ in. Bought £30. I.M. 306-70. 1110: Bronze Torque from a cemetery. Bussy le Charbon, Marne, France, Morel Collection. Plate 34, B.M. Central Saloon. 1111: Massive Indian Anklet, base metal. 1112: Gaulish Bronze Torque, Courtisole, Marne, France, Morel Collection, 1901. Plate 37, B.M., Central Saloon. 1113: Anklet, base metal, common in all metals in India. I.M. 938. 1115: Armlet, bronze, interment at Heiltz l'éveque, Marne, France, Morel Collection, 1901. B.M., Central Saloon. Compare with No. 1111. 1114: Torque, base metal, with hooked extremities engraved. Very common in India. 1116: Bronze Torque or Collar, from a Gaulish cemetery, Courtisole (Prosues), Marne, France. B.M., Central Saloon. According to Mons. Bertrand (Allen), the Marnian cemeteries date from about 350 to 200 B.C. of the iron age. 1117: Gilt Bracelet, twisted body and brush-like ends. Common in India. 1118: The end of a Bracelet, with ball. Indian.

Plate 162.—From the Wallace collection, reproduced by permission of the Trustees, kindly obtained by Claude Phillips, Esq., the keeper. The descriptions are taken from the catalogue.

1119: Tray of Silver Filigree, with an inlay of Cloisonné enamel. Genoese (?) fourteenth century. Gallery IV, case A, 22. An examination of this specimen shows, in the point of details of workmanship, how little difference there is between it and examples from Cuttack or Dacca.

1120: Parcel gilt Silver Anklet. Paizeb, India. Oriental Armour Gallery. One of a pair of very massive and lightly finished examples of the Indian anklet termed paizeb, as in Plate 8—5, and Plate 22—162 to 165.

1121: Silver Collar of Office, with links composed of thin realistic oak leaves and acorns sheltering modelled figures of a pheasant (?), a horse, a stag, a knight with sword uplifted, and a griffin; these alternating with other links of plain and massive design. Known as "Le Collier du' Roi de l'Arc." It would appear to have been worn by the successive "Kings" or "Constables" (i.e., Captains) of a civic Confraternity of Archers, existing in a Netherlandish city. The earliest of the plaques attached are dated respectively 1419, 1429, and 1499; the rest ranging through the sixteenth, seventeenth, eighteenth, and nineteenth centuries to 1826. The collar itself is of Netherlandish or German workmanship, and dates from the second half of the fifteenth century. Gallery III., case J, 508. The collar has been selected as almost the very opposite in design and character of work to anything which could have been produced in India at the same period, or indeed at any time.

1122: Pendant Jewel of gold, a double heraldic eagle crowned. The plumage is marked out in black enamel. In the centre is placed a shield-shaped ornament in which is set a table-diamond. The pendant is finished with a number of small drop pearls. German, late sixteenth century. Gallery IV., case A, 89.

The use of pearl drops from the lower or prominent points of ornaments seems to have been as common in the West as in the East.

1123: Pendant Jewel of beaten and wrought gold and filigree work, set with cabochon garnets. Romanesque style (eleventh or twelfth century). Gallery XII., case A, 94. An early European illustration of the use of cabochon garnets. The decorative value of polished carbuncles, and of cut garnets, was known from very early times in India. Some of the oldest Buddhist fragments of ornaments include this stone.

Plate 163.—Ornaments from the Wallace collection (continued). 1124: Gold Chain, with centres composed of interlaced crowns attached to cylinders, curiously decorated with crosses and other rude ornamentation. English, seventeenth century (?). Gallery IV., case A, 38. Watch chains for use of Parsees and wealthy merchants in Bombay are tending to become as massive as this example. It was chosen, however, to show the universality of the Trichinopoly chain.

1125: Chain of enamelled gold, set with garnets, the longer links showing minute designs in translucent enamel on a ground of crystal, foiled beneath. French, early seventeenth century. Gallery IV., case A, 40. Another illustration of art work directly opposed in character and design to anything Indian.

1126. Part of a Collar of silver, gilt filigree, set with gems. Cabinet in Armour Gallery VIII. 1127: Part of Collar, somewhat similar to No. 1126.

1128: Ring, Rosary, Beads, and Cross, of steel, damascened with arabesques in gold and silver. Spanish (?), sixteenth century. Gallery III., case J, 534. Chosen as a contrast to the damascened steel ornaments of India. The best tah-i-nishan work or true damascening in gold or steel of Jeypore is very similar in delicacy and taste (see pages 50 and 51) to this ornament.

1129: Ivory "Piqué" Necklace. A present from Marie Antoinette, Queen of France, to her intimate friend the Princess de Lamballe. The royal fleur-de-lys is wrought in gold "piqué" work on each of the ivory beads. Style and period of Louis Seize. Gallery XX., case A, 28. Of great historical interest. Enriching ivory in this way would not be difficult for an Indian, but he would hardly think it worth doing for jewellery.

1130: Pendant Jewel formed as a dove: the body composed of a baroque pearl, the head and wings of gold and white enamel. German (?), sixteenth century. Gallery XII., case A, 61.

1132: Pendant Jewel of enamelled gold, set with pearls and rubies. A dragon rendered in translucent green and opaque grey enamel. German, seventeenth century. Gallery XII., case A, 67.

1131: Pendant Jewel of gold and chalcedony, decorated with translucent enamels, table-diamonds, and other jewels. The cardinal virtue, Prudentia, with her attributes, the mirror and the serpent. Italian, sixteenth century. Gallery XII., case A, 65.

1133: Pendant Jewel, fashioned in the form of a rabbit, the body composed of a large baroque pearl, the head and legs of gold and white enamel. German, sixteenth century. Gallery XII., case A, 78.

1134: Pendant formed as an heraldic eagle crowned, with a body composed of a large baroque

pearl, and plumage represented by translucent and opaque enamel. German, late sixteenth century. Gallery XII. case A, 91. The last four examples are frankly European.

Plate 164.—1135: Portraits of Shuja-ud-daula (1760-1775) and of his sons. He was the first Nawab-Vazir of Oudh and was the ally of Ahmed Shah Abdali or Durani, who conquered the Mahrattas at the battle of Panipat, in January, 1761. As Vazir of the Empire, Nawab of Oudh, and ally of Mir Kasim, Nawab of Bengal, he was defeated by the British at the Battle of Buxar. Principally chosen to illustrate the jewelled head dresses of the period. From the India Office, reproduced by permission of the Secretary of State. Oudh was formerly a Viceroyalty held by a Vazir of the Moghul Emperor. After the Battle of Buxar, October 23rd, 1764, the British became virtually masters of the Province.

Plate 165.—1136: Portrait by Zoffany of Nawab Vazir Asaf-ud-daula of Oudh, 1775-1781. He was the son of Shuja-ud-daula. The ornaments worn though of great value are simple in character. Asaf-ud-daula ceded Benares to the East India Company. It was acquired in 1763.

Plate 166.—1137: Nawab Raza Khan, Minister of Asaf-ud-daula, Nawab Vazir of Lucknow. Painted at Lucknow in 1784, by Joh. Zoffany. India Office.

Plate 167.—1138: Lord Cornwallis receiving the sons of Tippu Sultan. Johann Zoffany. Reproduced by kind permission of Major E. C. Moor, the owner. Note from the catalogue of the Mohamadan Art and Life Exhibition, in 1908, at the Whitechapel Art Gallery: "A fine example of Zoffany's painting."

Hyder Ali usurped the sovereignty of Mysore, 1763-4; ravaged the Carnatic in January, 1769, and again in 1780, and defeated the British, 10th September, and took Arcot, 31st October, 1780; but was defeated by Sir Eyre Coote, 1st July, 1781, and uniting with the French was overthrown by Coote, 2nd June, 1782; died in September, and was succeeded by his son, Tippu Sahib, who took Caddalore, and in April, 1783, Bednore. An ignoble peace was made with him in 1784 (11th March), but war was renewed in 1790. Cornwallis defeated him at Arikera, 15th May, 1791. A definitive treaty made with him on 19th March, 1792, his two sons being hostages. They were restored 29th March, 1792. Seringapatam was stormed by General Baird. Tippu was killed 4th May, 1799, and Mysore divided 22nd June, 1799.

LIST OF ILLUSTRATIONS.

149 & 150. Indian Orders, in colours. 151. Mosaic of the 6th century. The Empress Theodora with attendants. 152. Fateh Ali Shah of Persia. 153. Nadir Shah of Persia, in colours. 154. Portrait of Nadir Shah of Persia. 155. Court reception by the Emperor of Delhi, including Sir David Ochterlony. 156. Court reception by the Emperor of Delhi, Akbar Shah II. 157. Gold Ornaments from Tomb No. 93 Enkomi (Salamis), Cyprus. 158. Necklaces and Pendants. 159. Earrings, Necklaces, and Bracelet. 160. Brooches, Bracelets, Pendants, Girdle Clasps, Buckles, and Studs. 161. Ornaments in Base Metal. 162. Tray of Silver Filigree, Silver-gilt Indian Foot Ornament, Silver Collar, and Pendants. 163. Gold Chains, Collar, Ring, Rosary Beads, Cross of Steel, Necklaces, and Pendants. 164. Shuja-ud-daula and his sons 165. Asaf-ud-daula. 166. Nawab Raza Khan. 167. Lord Cornwallis, receiving the sons of Tippu Sahib.

Notes and Errata.

The following correction is required to the statements on page 22 of Part II. these papers:

Akbar estimated his success "by the quantity of cordons (zïnars) of distinction taken from the necks of the Rajputs, and seventy-four mans and a half are the recorded amount." The man is four seers, the maund is forty. The total weight would therefore seem to be 320 pounds.

To eternize the memory of this disaster, the numerals 74½ are tilac or accursed. Marked on the banker's letter in Rajasthan, it is the strangest of seals, for the sin of the slaughter of Chitore is thereby invoked on all who violate a letter under the safeguard of this mysterious number. It is said that 8,000 Rajputs fell in the final assault, including all the heads of clans, both home and foreign, and seventeen hundred of the immediate kin of the prince.

Errata.

Page 7. 5th line from bottom: Abdalla to Abdalli.
Page 22. 12th line: 170 to 320, and bangles to cordons. 14th line: 170 to 320.
Page 23. 5th line from bottom: "elderly" to "elder."
Page 24. 34th line: after "whole" insert "in."
Page 42. 4th line from bottom: Rajputana to Malwa.
Page 65. 18th line from bottom: Hall to Hull.
Page 167. 17th line from bottom: Chrysochon to Chrysochou.
Plate title, 155.—1069. 1st line: change "in 1822" to "before 1822."

149.—1059. Insignia of the Star of India. (*a a*) Badges. (*b*) Star. (*c*) Collar. 1060. The Delhi Imperial Assemblage Medal, 1877. 1061. The Delhi Coronation Durbar Medal of 1903. Reproduced by permission of the Secretary of State for India.

1063. 1062. 1064

150.—1062. Insignia of the Order of the Indian Empire. (*a*) Badge. (*b*) Star. (*c*) Collar. 1063. The Indian Volunteer Officers' Decoration. 1064. The Kaisar-i-Hind Decoration. Reproduced by permission of the Secretary of State for India.

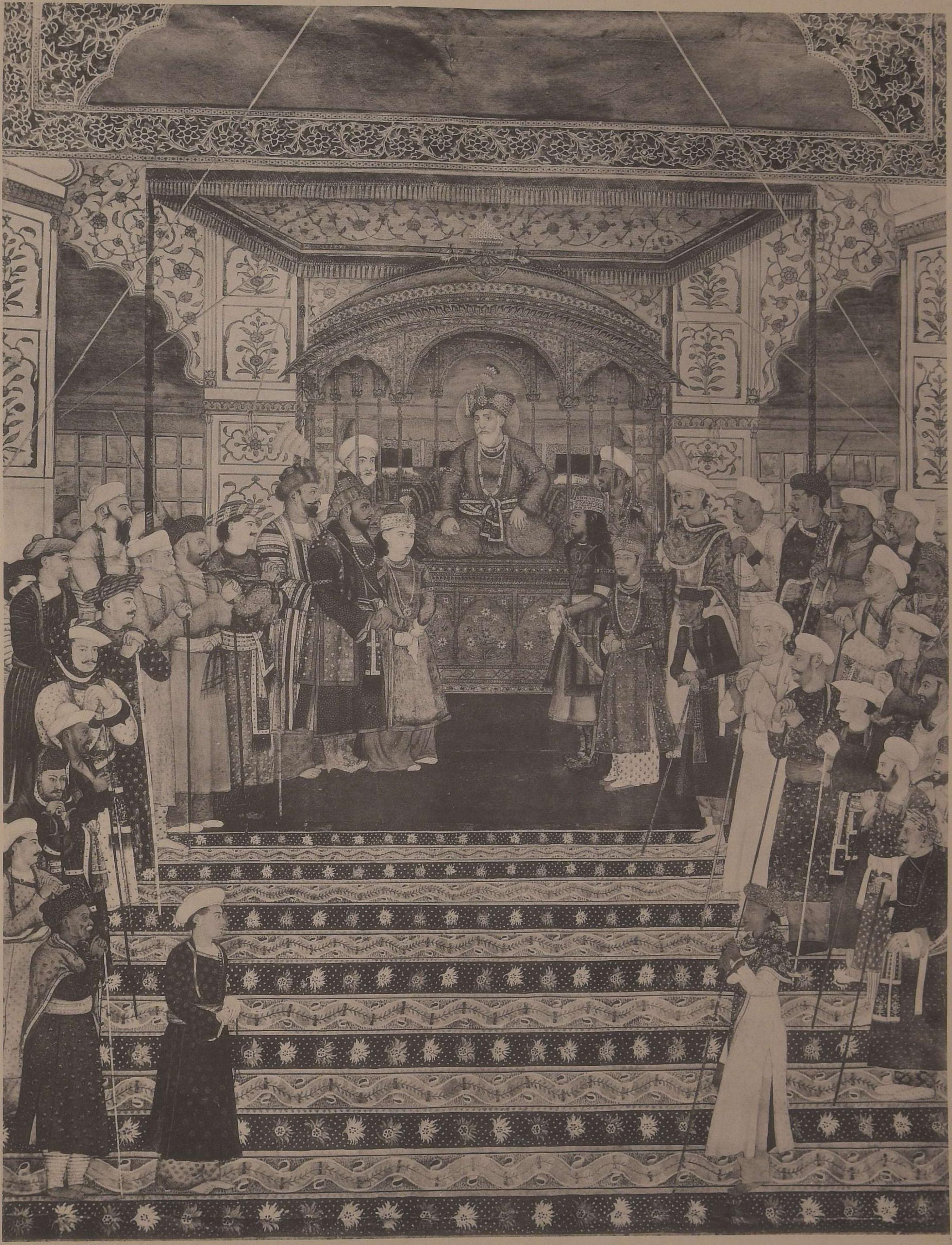
151.—1065 : The Empress Theodora with attendants. Mosaic of the 6th century, from the Church of San Vitale, Ravenna. (From a painted paper cast in the Victoria and Albert Museum).

152.—1066: Fateh Ali Shah, king of Persia (1797-1834). Painted by Mirza Baka, a Persian artist. India Office.

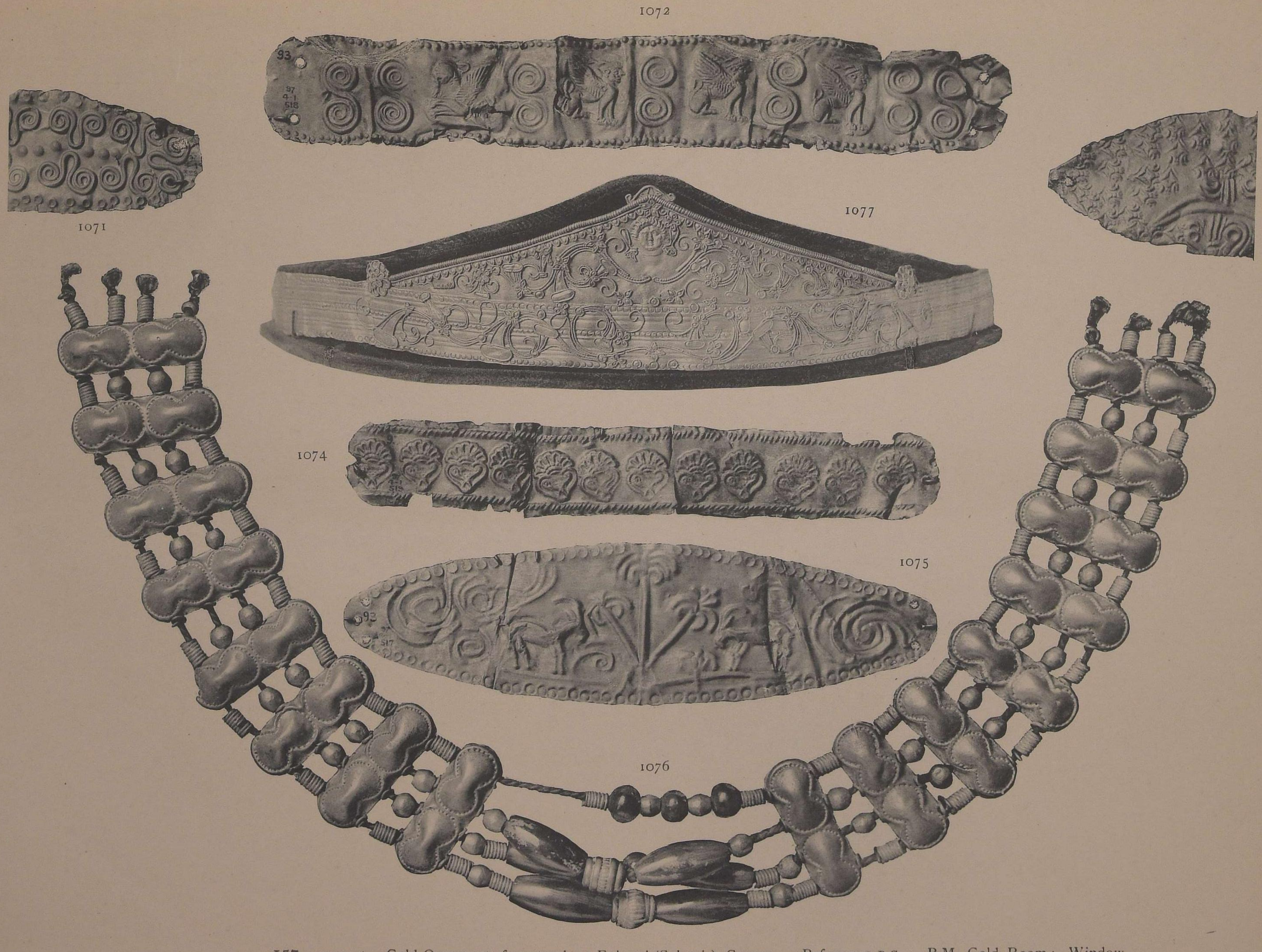
153.—1067 Nadir Shah of Persia (Tahmāsp Kuli Khan), who sacked Delhi in 1739. India Office.

154.—1068 : Portrait of Nadir Shah of Persia (otherwise Tahmāsp Kuli Khan, an Afshārhid Turk, 1736-1747), who sacked Delhi in March, 1739. (The late Earl Egerton of Tatton).

155.—1069. From a painting in tempera colours representing a Court reception by the Emperor of Delhi in 1822; it differs from Plate 156 chiefly in including a portrait of Sir David Ochterlony, the British agent at Delhi. India Office.



156.—1070 From a painting in tempera colours representing a Court Reception by the Emperor of Delhi, Akbar Shah II. (1806-1837.) I.M. 3535.



157.—1071-5: Gold Ornaments from tomb 93 Enkomi (Salamis). Cyprus. Before 700 B.C. B.M., Gold Room; Window Cases. 1076: Necklace from Enkomi, tomb 93, Carnelian and Gold. 1077: Diadem, ornamented with filigree. Found in 1865 at Santa Eufemia, Calabria, 4th Century B.C. Finest Greek period. B.M.—Gold Room; Case D.

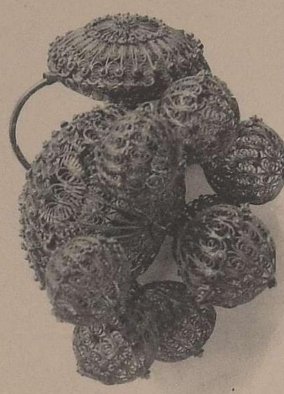
1078

1079

1080

1081

158.—1078: Pendant from a Diadem. A gold disc with pendent chains and five rows of pear shaped ornaments of three different designs. Reproduced from the original found in Southern Persia, and now in the Hermitage Museum, St. Petersberg, by Castellani. R.A., 632a. 1079: Necklace of pendent Pomegranates. Cyme in Æolis. Finest Greek period. B.M., Gold Room; Case D. (Castellani Collection.) 1080: Roman Egyptian Necklace (Franks' bequest). B.M., Gold Room Corridor. 1081: Magnificent Gold Necklace of jewelled and gold ornaments, suspended by a network of chains from a band of chains. B.M., Early Etruscan; Case C in Gold Room.



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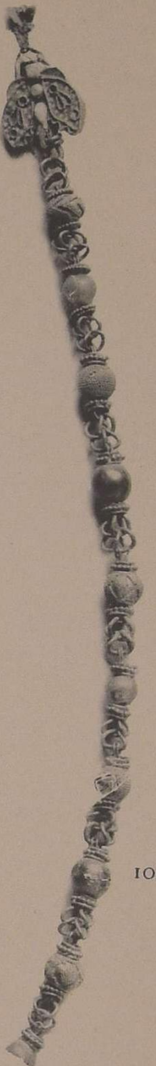

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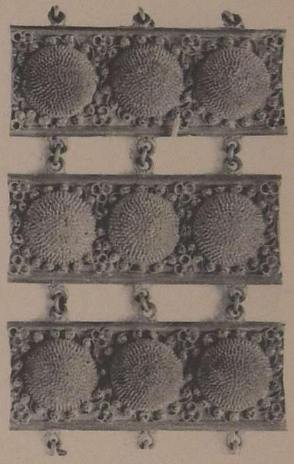

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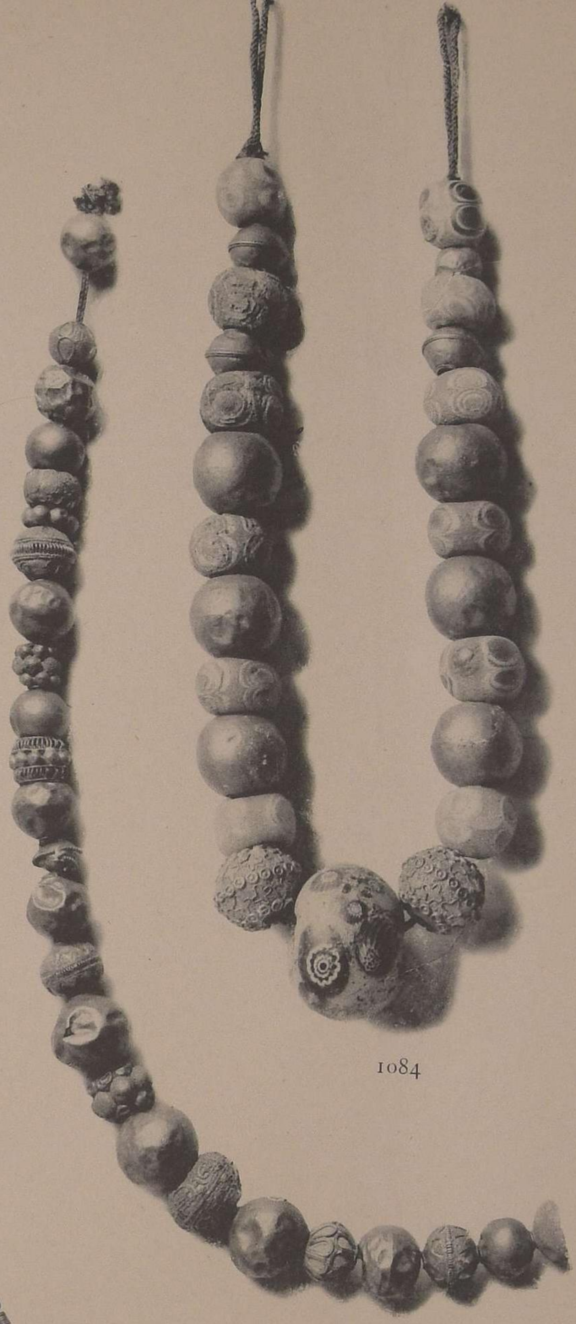

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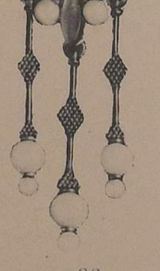
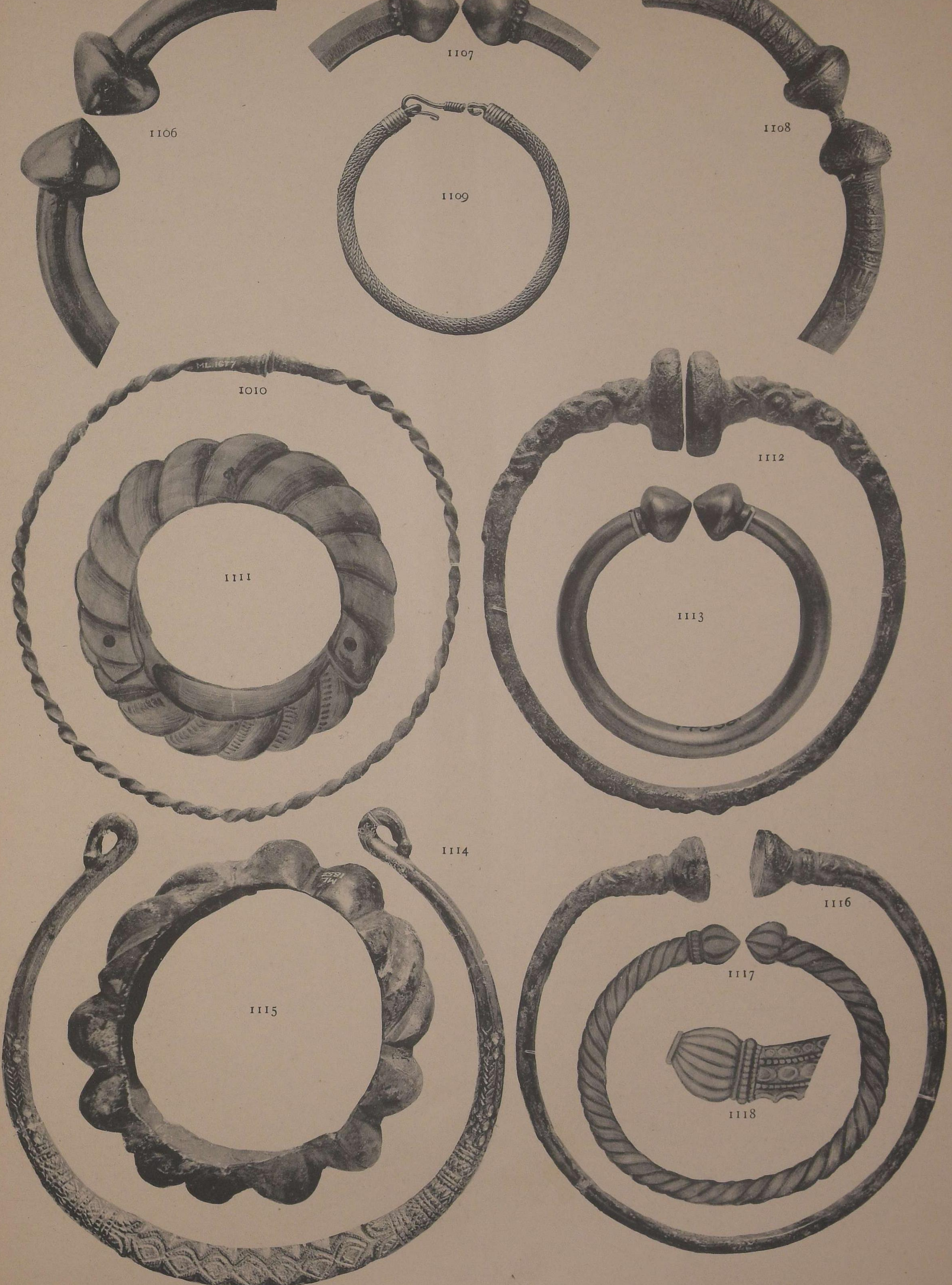


1088

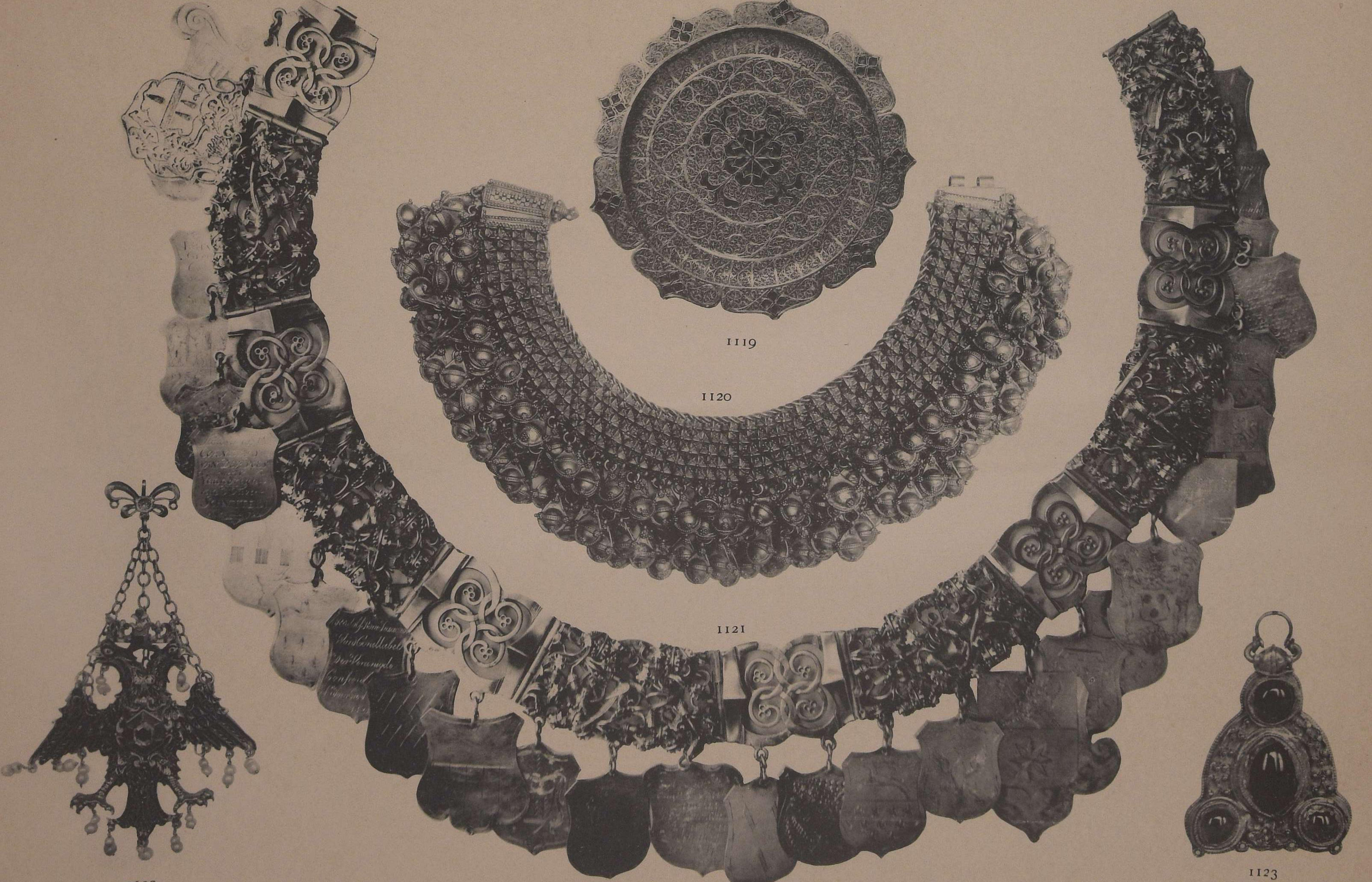
1089

159.—1082: Earring; Gold, open filigree. Indian (probably Cuttack). I.M., 616; 540. 1083: Necklace of Beads; Gold, granulated, plain and filigree. Early Etruscan. B.M., Gold Room; Case C. 1084: Necklace of Glass and Gold Beads. Early Etruscan. B.M., Case C, Gold Room. 1085: Part of a Necklace of Gold Beads. Roman. B.M., Gold Room; Case G. 1086: Part of Bracelet. Gold plaques with filigree bosses. Delhi. I.M., 40-1881. 1087: Gold Necklace with Cup Pendants. B.M., Ancient Egyptian case in Gold Room corridor. 1088: Earring, hung with sweetwater pearls. Made by Signor Giuliano. V. and A., 170-1900. 1089: Earring, gold and coral. Made by Signor Castellani. V. and A., 633a; 1884. Similar to one worn by the female on the lid of Sarcophagus. D. 786, B.M. Etruscan, 200-150 B.C. From Chiozo.

160.—1090: Bronze Brooch in form of the Swastica. Roman. Brough, Westmoreland. B.M., Central Saloon. 1091: Silver Brooch with Chain. Roman; Chorley. About A.D. 68. B.M., Central Saloon. 1092: Enamel Brooch. Roman. Hastings Collection. B.M., Central Saloon. 1093: Brooch similar to 1091. 1094: Bracelet; Gold with applied figures. Subject: Assyrian. Made by John Brogden. English; 19th century. V. and A., 735. 1095: Pendant in form of a king on a throne. Gold and Paste. Egyptian; 19th dynasty, or a little later; about B.C. 1300. B.M., Egyptian Room. 1096: Gold Bracelet with figures and hieroglyphics. Egyptian; about B.C. 966. B.M., 14595; Egyptian Room. 1097-1103: Enamelled Bronze Brooches and Studs, from near Chepstow, Monmouthshire. B.M., Central Saloon. Roman. 1104: Girdle Clasps, Silver. Modern Greek. I.M., 1475-1475a; 73. 1105: Gold Buckle with Garnets and Glass; Anglo-Saxon. B.M., Anglo-Saxon Room.



161.—Ornaments in base metal of different ages and countries, with the exception of 1111 and 1115, to illustrate different



1119

1120

1121

1122

1123

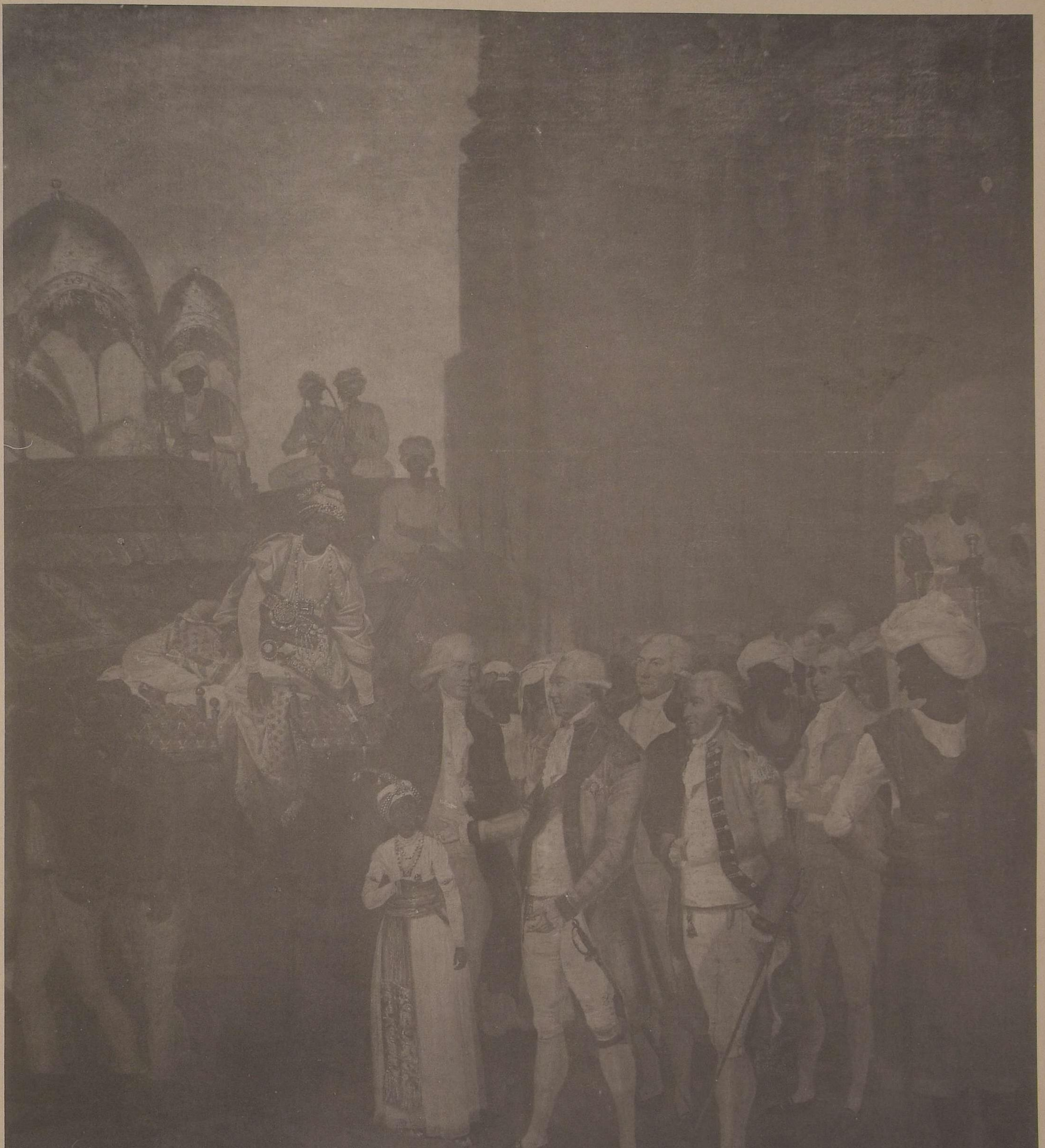
162.—1119: Tray of Silver Filigree with an inlay of Cloisonné Enamel. Genoese (?) XIX century. 1120: Fine example of a silver-gilt Paezeb or Indian Foot Ornament. Armour Gallery, 8. 1121: Silver Collar of Office (Le Collier du Roi de l'Arc) with numerous plaques, the earliest bearing date A.D. 1419. Netherlandish or German workmanship of the second half of the XV century (508 c.) Gallery IV, Case A, 22. 1122: Pendant, Jewel of Gold; Double Heraldic Eagle Crowned. German; late XVI century. Gallery XII; case A, 89. 1123: Pendant Jewel of Beaten and Wrought Gold, and Filigree work, set with cabochon garnets; Romanesque style; XI or XII century. Gallery XII; case A, 94. Wallace collection.

163.—1124 : One Gold Chain. English ; XVII century (?) Gallery IV, case A, 38. 1125 : Chain of Enamelled Gold, set with Garnets. French ; early XVII century. Gallery IV, case A, 40. 1126 : Part of a Collar of Silver-Gilt Filigree, set with Gems. Cabinet in Armour Gallery VIII. 1127 : Part of a Collar of Silver-Gilt Filigree, set with Gems. Cabinet in Armour Gallery, VIII. 1128 : Ring, Rosary,

164.—1135: Shuja-ud-Daula, Nawab Vazier of Oudh (1760-1775), and his sons. India Office.

165.—1136: Asaf-ud-Daula Nawab Vazir of Oudh (1775-1781). Painted by Zoffany. India Office.

166.—1137. Nawab Raza Khan, Minister to Asaf-ud-Daula. Nawab Vazir of Lucknow. Painted at Lucknow in 1784. by Joh. Zoffany. India Office.



167.—1138. Lord Cornwallis receiving the sons of Tippu Saheb, Sultan of Mysore (1749-1799). Painted by Zoffany, by permission of Major E. C. Moor.

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INDIAN JEWELLERY,

BY

THOMAS HOLBEIN HENDLEY, C.I.E.

Formerly Fellow of Calcutta University; Vice-President of the Asiatic Society of Bengal; President of the Second Decennial Art Conference, Lahore 1894; Member of the Judging Committee Delhi Exhibition, 1902-3 &c., &c., and Author of various works on Indian Art, &c., &c.

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